



November 12, 2013

Mr. Ed Tam
Belleau Wood Development, LLC
415 Pisgah Church Road, #363
Greensboro, North Carolina 27455

**Subject: Limited Soil and Groundwater Assessment Report
Intersection of North Graham Hopedale Road and North Church Street
Burlington, Alamance County, North Carolina
Progress Project No.: 1013130.002**

Dear Mr. Tam:

Progress Environmental, Inc. (Progress) is pleased to submit this Limited Soil and Groundwater Assessment Report for the property located in the northeast quadrant of North Graham Hopedale Road and North Church Street in Burlington, Alamance County, North Carolina (Figure 1). The purpose of the environmental services is to determine whether the site has been impacted by the historic uses of the site or by potential off-site sources.

INTRODUCTION

The site is approximately 9.64 acres and consists of a paved parking lot and inactive railroad spur that transects the site extending northwest to southeast. The Alamance County Geographic Information System identifies the parcel as 147805. Progress previously completed a review of the available North Carolina Department of Environment and Natural Resources (NCDENR) files on the CARA Portal and is preparing a Phase I Environmental Site Assessment (Phase I ESA) for the site.

FIELD ACTIVITIES

Geophysical Survey

A geophysical survey was completed on September 27, 2013 by Geo Solutions, Ltd. to determine if "orphaned" USTs, anomalies, or if evidence of buried debris was present beneath the site. The geophysical survey identified two unknown anomalies on the northeastern portion of the site. Additional structural anomalies were not identified.

Soil and Groundwater Sampling and Temporary Monitoring Well Installation Activities

On October 2, 2013, Progress installed three temporary one-inch monitoring wells (TW-1 through TW-3, Figure 2) and advanced eight soil borings (S-1 through S-5 and TW-1 through TW-3, Figure 2). On October 30, 2013 Progress installed six additional temporary monitoring wells (TW-4 through TW-9, Figure 2) and collected one soil sample (TW8-5, Figure 2) at the site to determine whether soil and/or groundwater beneath the site has been adversely affected by the historical uses or by potential

off-site sources that were identified during the October 2 and 3, 2013 soil and groundwater assessment and during the historical research for the Phase I ESA. The borings were advanced using a track-mounted Geoprobe®, which utilized the direct push drilling method.

Prior to initiating the first boring and between each subsequent boring, the Geoprobe® drill rig and associated downhole equipment were decontaminated with the use of a high-pressure steam cleaner. Soil samples were collected continuously in each boring from the ground surface to the boring termination, at approximate five-foot intervals. Each soil sample was collected by driving a five-foot long, 2.25-inch sampling probe into the soil. The probe is lined with a disposable clear plastic tube, which was replaced for each five-foot interval. After the probe is driven, the clear plastic tube filled with soil is removed from the probe. The clear plastic tube is then cut open to remove the soil for visual analysis and/or collection of a soil sample for laboratory analysis.

A representative portion of the soil samples collected from each of the Geoprobe® soil sample tubes was transferred into a new, clean resealable bag (half full). The bag was placed in a warm location. Approximately ten minutes after the time of collection, the bag was opened slightly and the probe of a RAE MiniRae Lite photoionization detector (PID) was inserted into the headspace of the bag. The meter of the PID was monitored and the reading recorded. The recorded PID responses are presented on the boring logs included in the Appendix.

Soil samples were collected and screened from the soil borings and temporary monitoring well borings at five foot intervals from the ground surface to a depths ranging from approximately 5 feet below land surface (bls) to approximately 15 feet bls.

One soil sample from each soil boring and select temporary monitoring well borings was submitted to a North Carolina certified laboratory for analysis. The soil sample selected for laboratory analysis from each boring was selected based on the depth to groundwater as estimated during the drilling activities. Based on historical groundwater data and the estimated depth to groundwater observed during the drilling activities, each soil sample selected for laboratory analysis was collected from a depth of one to five feet bls. The selected soil sample from each boring was placed into laboratory prepared containers and then into a cooler packed with ice and delivered under chain-of-custody to Research and Analytical Laboratories, Inc. (R&A) in Kernersville, North Carolina. Each soil sample S1-5, S2-5, S3-5, S4-5, S5-5, TW1-5, TW2-5, and TW3-5 was analyzed for volatile organic compounds (VOCs) using EPA Method 8260, for semi-volatile organic compounds (SVOCs) using EPA Method 8270BNA (base neutrals and acid extractables), for polychlorinated biphenyls (PCBs) using EPA Method 8082, and for Priority Pollutant Metals. Soil sample TW8-5 was analyzed for gasoline and diesel range total petroleum hydrocarbons (TPH) using EPA Method 8015/5035 and 8015/3550, respectively.

The temporary monitoring wells were advanced to a depth of approximately 20 to 25 feet bls to facilitate the collection of groundwater samples. Saturated soils were encountered in the soil borings at depths ranging from approximately six to 15 feet bls. Boring logs and temporary monitoring well construction diagrams, which include a description of the soil encountered and PID screening results, are included in the Appendix.

On October 3 and 31, 2013 static water levels were measured in the temporary monitoring wells TW-1 through TW-3 and existing monitoring well MWC-1 using a water level meter that was decontaminated between each well and groundwater samples were collected. Static water levels were measured in temporary monitoring wells TW-4 through TW-9 and groundwater samples were collected on October 31, 2013. Groundwater samples were collected from the temporary monitoring wells and the existing monitoring well using a disposable bailer and new length of

nylon string dedicated to each well. Prior to sampling, the temporary monitoring wells were purged of approximately three well volumes.

The groundwater samples were placed into laboratory prepared containers and then into a cooler packed with ice and delivered under chain-of-custody to R&A. The groundwater samples collected from temporary monitoring wells TW-1 through TW-3 and existing monitoring well MWC-1 were analyzed for VOCs using Standard Method 6200B plus isopropyl ether (IPE) and methyl tertiary butyl ether (MTBE), for SVOCs using EPA Method 625 BNA, for PCBs using EPA Method 8082, and for Priority Pollutant Metals. The groundwater samples collected from temporary monitoring wells TW-4 through TW-9 were analyzed for VOCs using Standard Method 6200B plus IPE and MTBE.

Following the collection of the soil samples, the soil borings were backfilled with bentonite chips and the investigation generated soil cuttings. The ground surface of the soil borings was repaired with asphalt patch, as necessary. The temporary monitoring wells will be properly abandoned, but have not been as of the date of this report.

Determination of Groundwater Flow Direction

The depth to the groundwater surface in temporary monitoring wells TW-1 through TW-9, and existing monitoring well MWC-1 was measured prior to well purging using a decontaminated electronic sounder. The wells were surveyed by Progress using a relative benchmark (top of casing for monitoring well MWC-1) that was arbitrarily given an elevation of 100 feet. The elevations of the monitoring wells and the groundwater surface are both relative to that benchmark. The relative groundwater elevations are shown in Table 3 and depicted on Figure 3. Based on information collected during the assessment activities, the groundwater flow direction beneath the site appears to be generally to the north-northwest beneath the site.

LABORATORY ANALYTICAL RESULTS

A summary of the soil analysis is summarized below and in Table 1:

- Laboratory analysis of soil samples S1-5, S2-5, S3-5, S4-5, S5-5, TW1-5, TW2-5, and TW3-5 detected targeted Priority Pollutant Metals above the laboratory quantitation limits, but below the NCDENR, Inactive Hazardous Sites Branch (IHSB) Soil Remediation Goals (SRGs) dated July 2013.
- Laboratory analysis of soil sample S2-5 detected fluoranthene at a concentration of 0.044J parts per million (ppm), which is below its SRG. Based on the detected concentrations of Priority Pollutant Metals and the lack of additional targeted VOCs, SVOCs, or PCBs being detected at concentrations exceeding the laboratory detection limit and/or their respective SRGs, the metals concentrations may represent naturally occurring concentrations.
- Laboratory analysis of soil sample TW8-5 detected gasoline and diesel range TPH above the North Carolina Action Levels.
- Please note, background soil samples were not collected as part of this assessment. The laboratory data sheets and chain-of-custody record are attached.

A summary of the groundwater analysis is summarized below and in Table 2:

- Laboratory analysis of the groundwater samples collected from temporary monitoring wells TW-1 through TW-3 and monitoring well MWC-1 detected total chromium above its North Carolina 2L Groundwater Quality Standards (NC2LGWQS).
- Laboratory analysis of the groundwater sample collected from existing monitoring well MWC-1 also detected total cadmium and total lead above their respective NC2LGWQS.
- Laboratory analysis of the groundwater sample collected from temporary monitoring well TW-1 also detected benzene, 1,2-dichloroethane, naphthalene, and 1-methylnaphthalene above their respective NC2LGWQS.
- Laboratory analysis of the groundwater samples collected from temporary monitoring wells TW-4 through TW-7 did not detect targeted compounds above their respective NC2LGWQS.
- Laboratory analysis of the groundwater samples collected from temporary monitoring wells TW-8 and TW-9 detected benzene above its NC2LGWQS.
- Laboratory analysis of the groundwater sample collected from temporary monitoring well TW-8 also detected i-propylbenzene and naphthalene above their respective NC2LGWQS.
- Please note, background groundwater samples were not collected as part of this assessment.
- The elevated concentrations of the detected Priority Pollutant Metals may be attributable to the turbidity of the groundwater samples.

CONCLUSIONS

Based on the results of the laboratory testing, Progress makes the following conclusions:

- The limited soil and groundwater assessment did not identify evidence of targeted compounds above the SRGs in the soil samples collected.
- The concentrations of detected petroleum-related compounds in the groundwater samples collected from temporary monitoring wells TW-1, TW-8, and TW-9 exceed their respective NC2LGWQS.
- Based upon the calculated groundwater flow direction, the absence of identifiable on-site sources of petroleum, the proximity to the documented off-site release of petroleum products at 1845 North Church Street, and the potential for petroleum releases (historical or recent) to have occurred at 1846 North Church Street, the petroleum-related compounds detected in the groundwater samples collected from temporary monitoring wells TW-1, TW-8, and TW-9 are most likely attributable to the off-site release(s) of petroleum products. The low levels of gasoline and diesel range TPH detected in soil sample TW8-5 may be the result of fluctuations in the groundwater table or vapors emanating from the impacted groundwater due to the relatively shallow depth to groundwater.

RECOMMENDATIONS

Based on the results of the laboratory testing, Progress makes the following recommendations:

- If USTs, impacted soil, or hazardous materials are encountered during future redevelopment activities, they should be handled and disposed in accordance with current NCDENR rules and regulations. Progress recommends that the current property owner be notified and that a copy of this report be submitted to the NCDENR.

- Furthermore, Progress also considers this site to be a potential candidate for the North Carolina Brownfields Program in an effort to limit the liability and exposure to a prospective developer not deemed responsible for the impacted media at the site. The Brownfields program requires that an eligibility application be submitted by the prospective developer, which should include associated documentation (i.e. Phase I ESA and assessment activities). The eligibility process can take approximately two to six weeks for the site to be approved for entry into the program. The Brownfields Program could require additional assessment of the soil and groundwater at the site. The site eligibility must be determined prior to a property transaction occurring.

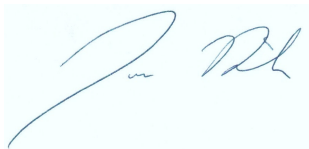
CLOSING

This report is intended for the use of Belleau Wood Development, LLC, subject to the contractual terms agreed to for this project. Reliance on this document by any other party is forbidden without the express written consent of Progress, and that party's acceptance of mutually agreeable terms and conditions. Use of this report for purposes beyond those reasonably intended by Belleau Wood Development, LLC and Progress will be at the sole risk of the user.

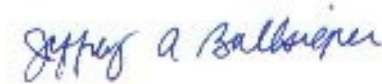
We appreciate your selection of Progress for this project and look forward to assisting you further on this and other projects. If you have any questions, please do not hesitate to contact us at (336) 722-9999.

Sincerely,

PROGRESS ENVIRONMENTAL, INC.



Jason T. Ricks
Senior Environmental Scientist



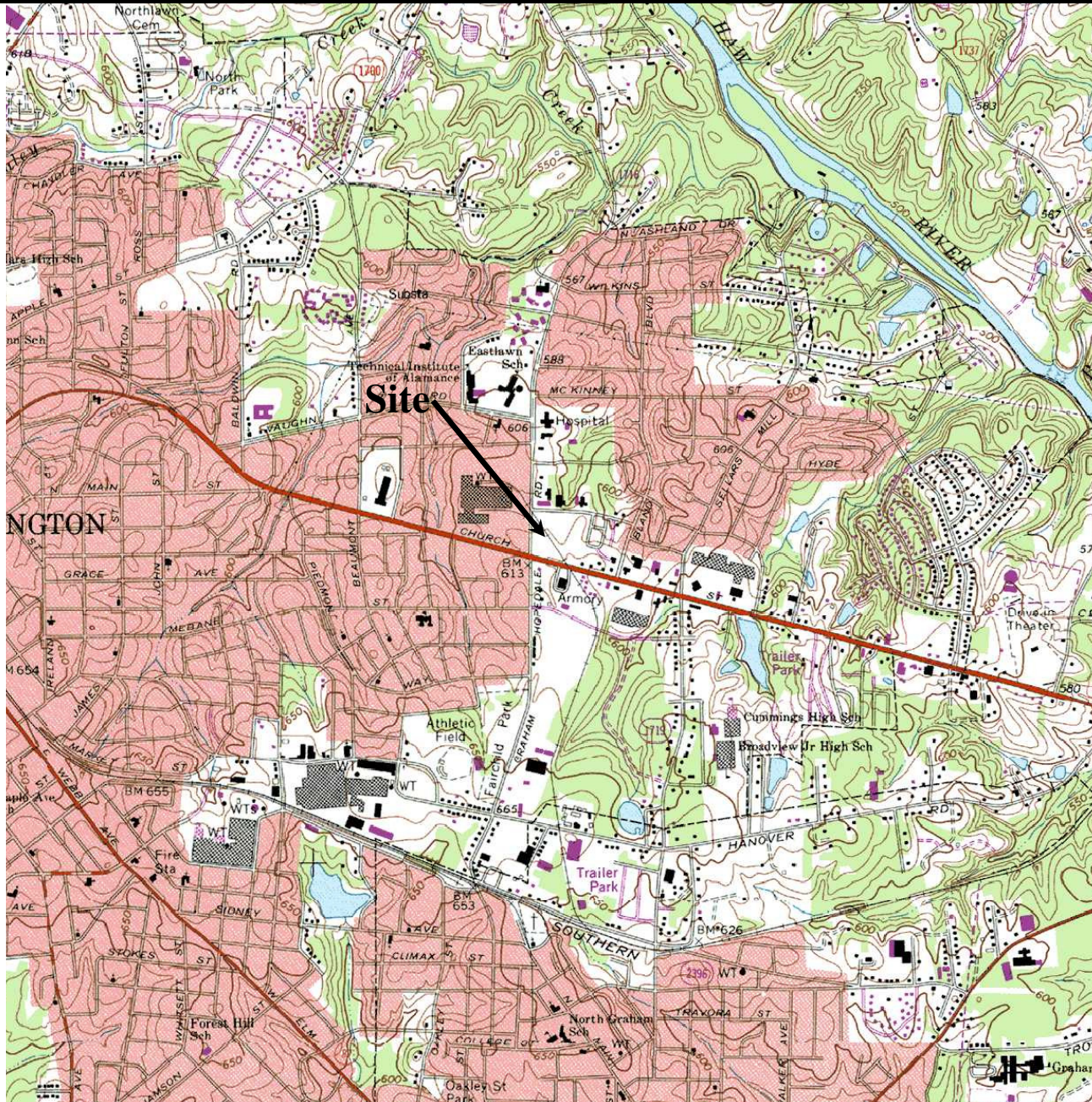
Jeffrey A. Ballsieper, L.G.
Director of Environmental Services

Attachments: Figures
 Tables
 Boring Logs
 Laboratory Analytical Reports

FIGURES

Figure 1
Topographic Site Map

Intersection of North Graham Hopedale Road and North Church Street
Burlington, Alamance County, North Carolina



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Progress 
ENVIRONMENTAL INC

USGS 7.5 Minute Series Topographic Map
Contour Interval: 10 feet
Scale: 1" = 2000'
Burlington, N.C.
Date: 1969, Photorevised 1981

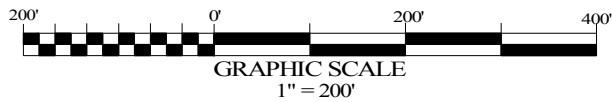
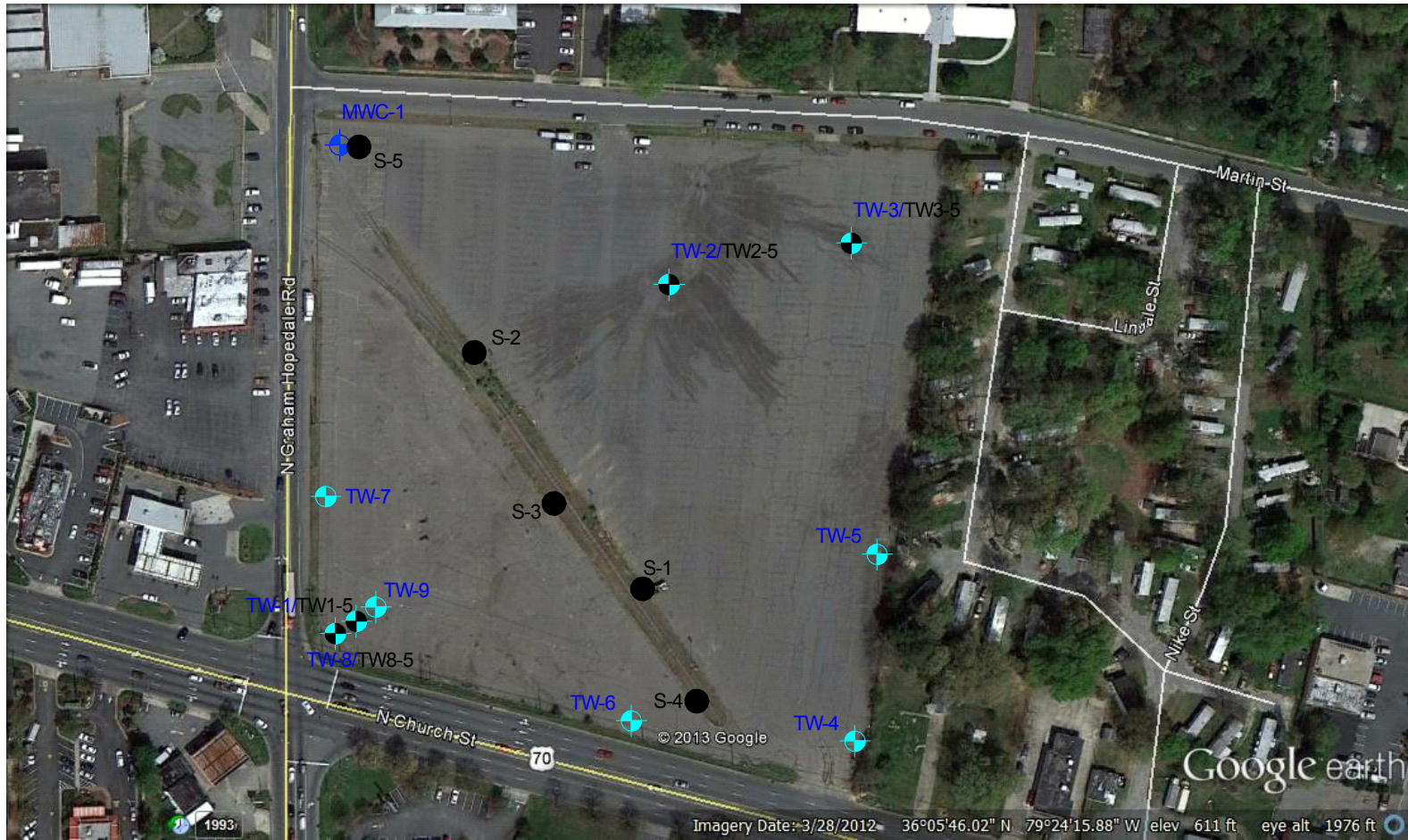
Project: N. Graham Hopedale

Client: Belleau Wood Dev.,
LLC

Progress Job #: 1013130.002

Date: November 2013





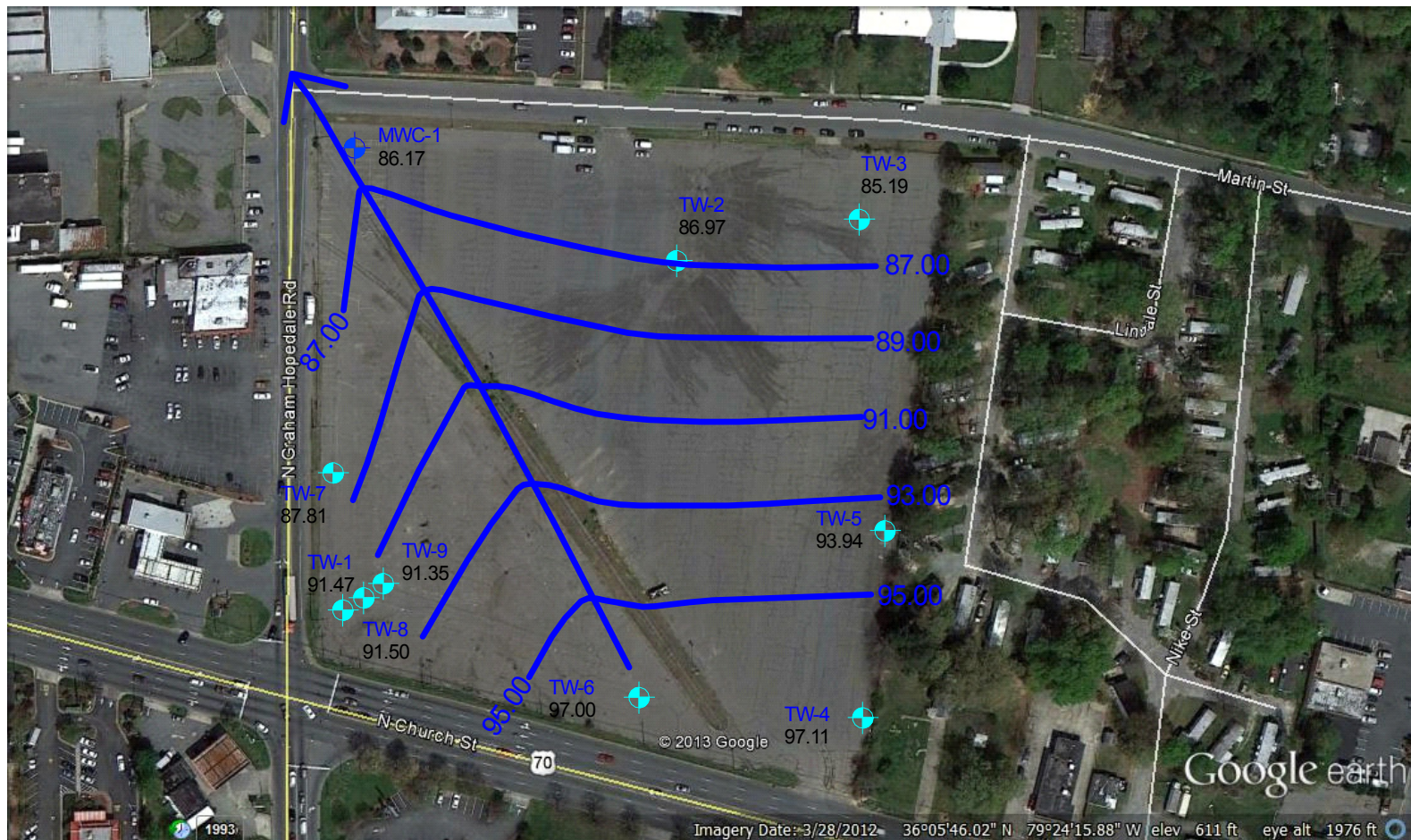
- MWC-1 APPROXIMATE EXISTING MONITORING WELL LOCATION
- TW-1/TW1-5 APPROXIMATE TEMPORARY MONITORING WELL LOCATION AND SOIL SAMPLE LOCATION
- S-4 APPROXIMATE SOIL SAMPLE LOCATION
- TW-6 APPROXIMATE TEMPORARY MONITORING WELL LOCATION

FIGURE 2
SOIL AND GROUNDWATER SAMPLE
LOCATION MAP
FORMER TAMP FACILITY
INTERSECTION OF N. GRAHAM
HOPEDALE ROAD AND N. CHURCH STREET
BURLINGTON, NORTH CAROLINA

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DRAWN	JTR	DATE	NOV 2013
CHECKED	JAB	DATE	NOV 2013
SCALE	AS SHOWN	PROJECT	1013130.002
TITLE	Figure 2 SKF		



- ◆ MWC-1 APPROXIMATE EXISTING MONITORING WELL LOCATION
- ◆ TW-1 APPROXIMATE TEMPORARY MONITORING WELL LOCATION
- (92.13) GROUNDWATER ELEVATION
- 86.00 GROUNDWATER CONTOUR AND ELEVATION (INTERVAL = 2.00 FT.)
- ← CALCULATED GROUNDWATER FLOW DIRECTION
- INFERRED GROUNDWATER ELEVATION

DRAWN	JTR	DATE	NOV 2013
CHECKED	JAB	DATE	NOV 2013
SCALE	AS SHOWN	PROJECT	1013130.002
TITLE	Figure 3 SKF		

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FIGURE 3
POTENTIOMETRIC SURFACE MAP
FORMER TAMP FACILITY
INTERSECTION OF N. GRAHAM
HOPEDALE ROAD AND N. CHURCH STREET
BURLINGTON, NORTH CAROLINA

TABLES

Table 1
Summary of Soil Analytical Results
Former TAMP Facility
Report of Limited Soil and Groundwater Assessment

Analytical Method			5035	3550	8082	8260	8270	Priority Pollutant Metals												
Sample ID	Contaminant of Concern		GRO	DRO	PCBs	Targeted Compounds	Fluoranthene	Total Silver	Total Arsenic	Total Beryllium	Total Cadmium	Total Chromium	Total Copper	Total Mercury	Total Nickel	Total Lead	Total Antimony	Total Selenium	Total Thallium	Total Zinc
	Date Collected (m/dd/yy)	Approximate Sample Depth (feet BLS)																		
S1-5	10/2/2013	1-5	NA	NA	BQL	BQL	BQL	BQL	BQL	0.178	BQL	14.3	21.3	0.057	3.17	6.86	BQL	BQL	BQL	10.0
S2-5	10/2/2013	1-5	NA	NA	BQL	BQL	0.044J	BQL	BQL	0.456	BQL	30.9	43.4	0.068	8.80	5.04	BQL	BQL	BQL	29.5
S3-5	10/2/2013	1-5	NA	NA	BQL	BQL	BQL	BQL	BQL	0.182	BQL	11.7	8.41	0.035	2.65	3.08	BQL	BQL	BQL	11.9
S4-5	10/2/2013	1-5	NA	NA	BQL	BQL	BQL	BQL	BQL	0.654	BQL	39.9	64.4	BQL	4.24	10.4	BQL	BQL	BQL	20.8
S5-5	10/2/2013	1-5	NA	NA	BQL	BQL	BQL	BQL	BQL	0.408	BQL	7.07	14.0	BQL	3.80	7.83	BQL	BQL	BQL	30.1
TW1-5	10/2/2013	1-5	NA	NA	BQL	BQL	BQL	BQL	BQL	0.169	BQL	8.36	8.43	BQL	2.31	2.70	BQL	BQL	BQL	11.2
TW2-5	10/2/2013	1-5	NA	NA	BQL	BQL	BQL	BQL	BQL	0.418	BQL	59.9	22.2	0.042	25.4	BQL	BQL	BQL	BQL	58.2
TW3-5	10/2/2013	1-5	NA	NA	BQL	BQL	BQL	BQL	BQL	0.690	BQL	95.4	48.2	BQL	45.0	BQL	BQL	BQL	BQL	153
TW8-5	10/30/2013	1-5	24.5	17.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NC Action Level (mg/kg)			10	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IHSB SRGs Residentail Health Based (mg/kg)			N/A	N/A	N/A	N/A	460	78	0.61	32	14	24,000/0.29*	620	4.6	160	400	6.2	78	0.16	4,600
IHSB SRGs Industrial Health Based (mg/kg)			N/A	N/A	N/A	N/A	4,400	1,000	2.4	400	160	100,000/5.6*	8,200	62	2,000	800	82	1,000	2.0	62,000
IHSB SRGs Protection of Groundwater (mg/kg)			N/A	N/A	N/A	N/A	330	3.4	5.8	63	3.0	360,000/3.8*	700	1.0	130	270	0.90	2.1	0.28	1,200

NOTES:

 = Concentration exceeds the IHSB SRG or the NC Action Level

BQL = Below Quantitation Limits

IHSB SRGs = Inactive Hazardous Sites Branch Soil Remediation Goals dated July 2013

* = Chromium III Standard/Chromium VI Standard

BGS = below ground surface

mg/kg =milligrams per kilogram

NE = Not Established

N/A = Not Applicable

NA = Not Analyzed

Table 2
Summary of Groundwater Analytical Results
Former TAMP Facility
Report of Limited Soil and Groundwater Assessment

Analytical Method			6200B														625BNA			8082	Priority Pollutant Metals													
Contaminant of Concern			Benzene	1,2-Dichloroethane	Ethylbenzene	1-Propylbenzene	Naphthalene	N-Butylbenzene	N-Propylbenzene	p-Isopropyltoluene	Sec-Butylbenzene	Tert-Butylbenzene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Total Xylenes	Naphthalene	2-Methylnaphthalene	1-Methylnaphthalene	PCBs	Total Silver	Total Arsenic	Total Beryllium	Total Cadmium	Total Chromium	Total Copper	Total Mercury	Total Nickel	Total Lead	Total Antimony	Total Selenium	Total Thallium	Total Zinc	
Well ID	Date Collected (m/dd/yy)	Depth to Water (Ft. Below TOC) Measured 10/31/13																																
TW-1	10/3/2013	16.65	1,490	7.92	0.2J	13.3	25.4	0.41J	2.20	BQL	0.97	0.29J	0.64	BQL	BQL	0.32J	101	11.2J	8.35J	BQL	BQL	BQL	BQL	BQL	83.0	118	BQL	38.7	BQL	BQL	BQL	BQL	193	
TW-2	10/3/2013	6.62	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	7.06	1.07	BQL	83.9	81.4	BQL	36.4	BQL	BQL	BQL	BQL	91.6	
TW-3	10/3/2013	12.81	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	63.9	57.9	BQL	33.9	BQL	BQL	BQL	BQL	119	
MWC-1	10/3/2013	13.83	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	12.3	25.4	24.3	BQL	6.20	32.2	BQL	BQL	BQL	214	
TW-4	10/31/2013	15.07	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
TW-5	10/31/2013	10.60	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
TW-6	10/31/2013	13.32	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
TW-7	10/31/2013	18.42	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
TW-8	10/31/2013	17.26	406	BQL	153	124	58.5	6.80	59.1	12.8	11.6	BQL	9.30	89.2	40.7	198	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
TW-9	10/31/2013	16.20	2.05	BQL	BQL	0.24J	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.13J	BQL	0.54J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
NC2LGWQS (µg/l)			1	0.4	600	70	6	70	70	25	70	70	600	400	400	500	6	30	1	N/A	20	10	4*	2	10	1,000	1	100	15	1*	20	0.2*	1,000	

= Values are those that exceed the North Carolina 2L Groundwater Quality Standard (NC2LGWQS)
BQL = not detected above laboratory detection standard
Results are reported in µg/l
µg/L = micrograms per liter
TOC = top of casing
* = Interim Maximum Allowable Concentration

Table 3
Well Construction Information
Former TAMP Facility
Limited Soil and Groundwater Assessment

Monitoring Well ID	Installation Date	Well Diameter Inches	Screened Interval (feet)	Total Depth (feet)	Depth to Water (Feet TOC) October 31, 2013	Relative Elevation (Feet TOC)**	Groundwater Elevation (feet)
TW-1	10/2/2013	1	10-25	25	16.65	108.12	91.47
TW-2	10/2/2013	1	10-25	25	6.62	93.59	86.97
TW-3	10/2/2013	1	10-25	25	12.81	98.00	85.19
MWC-1	12/7/1993	2	9.4-29	29	13.83	100.00	86.17
TW-4	10/31/2013	1	10-20	20	15.07	112.18	97.11
TW-5	10/31/2013	1	10-20	20	10.60	104.54	93.94
TW-6	10/31/2013	1	10-20	20	13.32	110.32	97.00
TW-7	10/31/2013	1	10-25	25	18.42	106.23	87.81
TW-8	10/31/2013	1	10-25	25	17.26	108.76	91.50
TW-9	10/31/2013	1	10-25	25	16.20	107.55	91.35

** - The top-of-casing elevation of each functioning well relative to an arbitrary benchmark (MWC-1) was established with an assumed elevation of 100 feet.

-- = Not Measured

BORING LOGS

120 Fayette Street
Winston-Salem, North Carolina 27101
(336) 722-9999

Project: Former TAMP Site

Location: Burlington, NC

Date: October 2013

Project Manager: J. Ballsieper

Boring/Well ID:
S-1

Job No.: 1013130.002

Start Date: 10/2/13

Complete Date: 10/2/13

Hole Diameter: 2.5"

Casing Diameter:

Drilling Method: Geoprobe - Direct Push

Total Depth: 5.0'

Remarks: _____

Depth (feet)	Sample ID	Blows	Rec/Adv (in)	PID (ppm)	Water Table	Lithology	Geologic Description	Well Diagram
				678.5			Mottled Orange, Yellow, and Red Silty Clay	
							Boring terminated @ 5 feet bls	
10								10
20								20
30								30
40								40
50								50
60								60

120 Fayette Street
Winston-Salem, North Carolina 27101
(336) 722-9999

Project: Former TAMP Site

Location: Burlington, NC

Date: October 2013

Project Manager: J. Ballsieper

Boring/Well ID:
S-2

Job No.: 1013130.002

Start Date: 10/2/13

Complete Date: 10/2/13

Hole Diameter: 2.5"

Casing Diameter:

Drilling Method: Geoprobe - Direct Push

Total Depth: 5.0'

Remarks: _____

Depth (feet)	Sample ID	Blows	Rec/Adv (in)	PID (ppm)	Water Table	Lithology	Geologic Description	Well Diagram
				287.4			Brown Red Sandy Clay	
							Boring terminated @ 5 feet bls	
10								10
20								20
30								30
40								40
50								50
60								60

120 Fayette Street
Winston-Salem, North Carolina 27101
(336) 722-9999

Project: Former TAMP Site

Location: Burlington, NC

Date: October 2013

Project Manager: J. Ballsieper

Boring/Well ID:
S-3

Job No.: 1013130.002

Start Date: 10/2/13

Complete Date: 10/2/13

Hole Diameter: 2.5"

Casing Diameter:

Drilling Method: Geoprobe - Direct Push

Total Depth: 5.0'

Remarks: _____

Depth (feet)	Sample ID	Blows	Rec/Adv (in)	PID (ppm)	Water Table	Lithology	Geologic Description	Well Diagram
				645.8			Reddish Brown and Orange Sandy Clay Boring terminated @ 5 feet bls	
10								10
20								20
30								30
40								40
50								50
60								60

120 Fayette Street
Winston-Salem, North Carolina 27101
(336) 722-9999

Project: Former TAMP Site

Location: Burlington, NC

Date: October 2013

Project Manager: J. Ballsieper

Boring/Well ID:
S-4

Job No.: 1013130.002

Start Date: 10/2/13

Complete Date: 10/2/13

Hole Diameter: 2.5"

Casing Diameter:

Drilling Method: Geoprobe - Direct Push

Total Depth: 5.0'

Remarks: _____

Depth (feet)	Sample ID	Blows	Rec/Adv (in)	PID (ppm)	Water Table	Lithology	Geologic Description	Well Diagram
				706.8			Red Orange Silty Clay	
							Boring terminated @ 5 feet bls	
10								10
20								20
30								30
40								40
50								50
60								60

120 Fayette Street
Winston-Salem, North Carolina 27101
(336) 722-9999

Project: Former TAMP Site

Location: Burlington, NC

Date: October 2013

Project Manager: J. Ballsieper

Boring/Well ID:
S-5

Job No.: 1013130.002

Start Date: 10/2/13

Complete Date: 10/2/13

Hole Diameter: 2.5"

Casing Diameter:

Drilling Method: Geoprobe - Direct Push

Total Depth: 5.0'

Remarks: _____

Depth (feet)	Sample ID	Blows	Rec/Adv (in)	PID (ppm)	Water Table	Lithology	Geologic Description	Well Diagram
				3.8			Orange Sandy Clay	
							Boring terminated @ 5 feet bls	
10								10
20								20
30								30
40								40
50								50
60								60

120 Fayette Street
Winston-Salem, North Carolina 27101
(336) 722-9999

Project: Former TAMP Facility

Location: Burlington, NC

Date: October 2013

Project Manager: J. Ballsieper

Boring/Well ID:
TW-1/TW1-5

Job No.: 1013130.002

Start Date: 10/2/2013

Complete Date: 10/2/2013

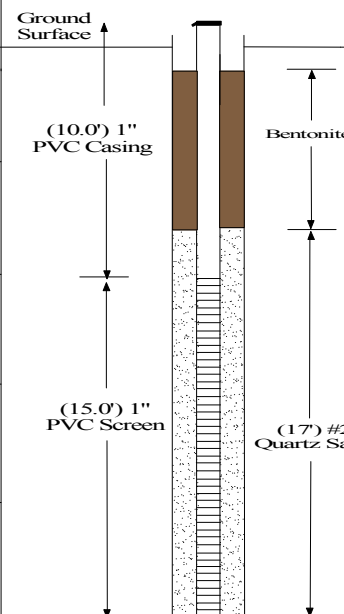
Hole Diameter: 2.5"

Casing Diameter: 1"

Drilling Method: Geoprobe - Direct Push

Total Depth: 25.0'

Remarks: _____

Depth (feet)	Sample ID	Blows	Rec/Adv (in)	PID (ppm)	Water Table	Lithology	Geologic Description	Well Diagram
10				1,902			Orange Sandy Clay (stained gray-green)	
				442.8			Orange Tan Sandy Clay	
				1,014			Tan to Med. Gray Sand	
				318.4			Brown Orange Silty Clay (Moist)	
20							No Sample	
30							Boring Terminated @ 25 feet bls	
40								
50								
60								

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(336) 722-9999

Project: Former TAMP Facility

Location: Burlington, NC

Date: October 2013

Project Manager: J. Ballsieper

Boring/Well ID:
TW-2/TW2-5

Job No.: 1013130.002

Start Date: 10/2/2013

Complete Date: 10/2/2013

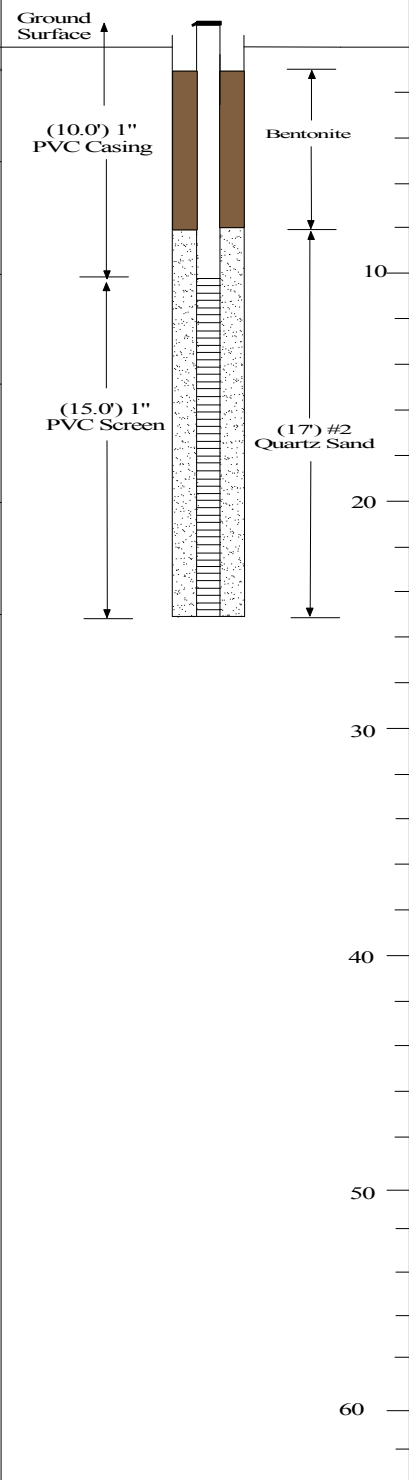
Hole Diameter: 2.5"

Casing Diameter: 1"

Drilling Method: Geoprobe - Direct Push

Total Depth: 25.0'

Remarks: _____

Depth (feet)	Sample ID	Blows	Rec/Adv (in)	PID (ppm)	Water Table	Lithology	Geologic Description	Well Diagram
				43.2			Med. Gray Sandy Clay (Moist @ 5')	 <p>Ground Surface</p> <p>(10.0') 1" PVC Casing</p> <p>Bentonite</p> <p>(15.0') 1" PVC Screen</p> <p>(17') #2 Quartz Sand</p> <p>Boring Terminated @ 25 feet bls</p>
10				N/A			Gray Med. Grained Sand	
				N/A			Gray to Tan Silty Clay	
20				N/A			Lt. Gray to Tan Silty Clay	
				N/A			Tan Silty Sand (Wet)	
30								
40								
50								
60								

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Project: Former TAMP Facility

Location: Burlington, NC

Date: October 2013

Project Manager: J. Ballsieper

Boring/Well ID:
TW-3/TW3-5

Job No.: 1013130.002

Start Date: 10/2/2013

Complete Date: 10/2/2013

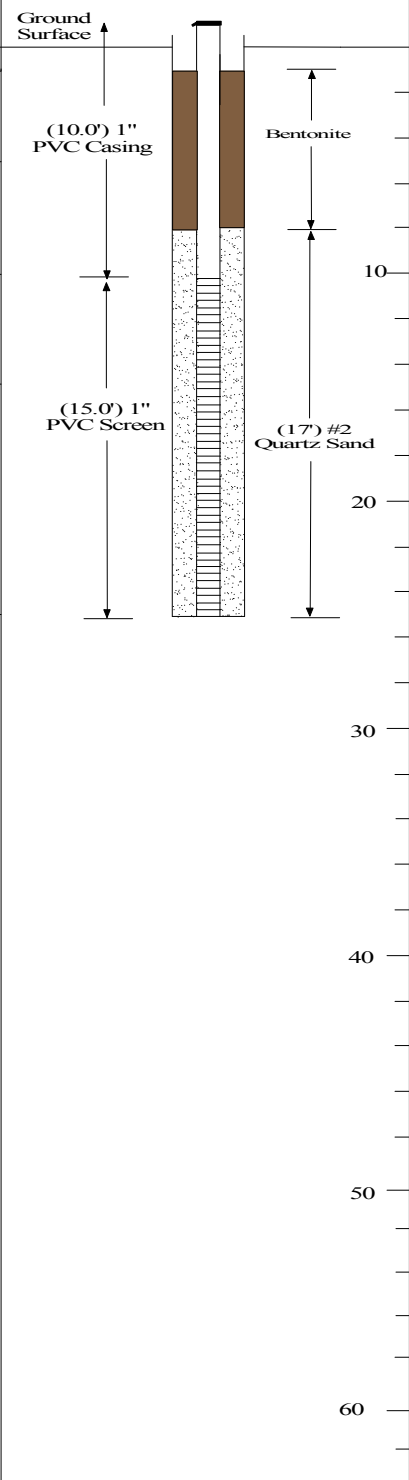
Hole Diameter: 2.5"

Casing Diameter: 1"

Drilling Method: Geoprobe - Direct Push

Total Depth: 25.0'

Remarks: _____

Depth (feet)	Sample ID	Blows	Rec/Adv (in)	PID (ppm)	Water Table	Lithology	Geologic Description	Well Diagram
							Burnt Wood Pieces	
				337.1			Gray to Orange Silty Clay	
10				37.2			Tan Sand - Saprolite	
				15.8			Brown to Orange Sandy Clay	
20				N/A			Tan to Orange Sandy Clay (Moist)	
							Boring Terminated @ 25 feet bls	
30								
40								
50								
60								

120 Fayette Street
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(336) 722-9999

Project: Former TAMP Facility

Location: Burlington, NC

Date: October 2013

Project Manager: J. Ballsieper

Boring/Well ID:
TW4

Job No.: 1013130.002

Start Date: 10/30/2013

Complete Date: 10/30/2013

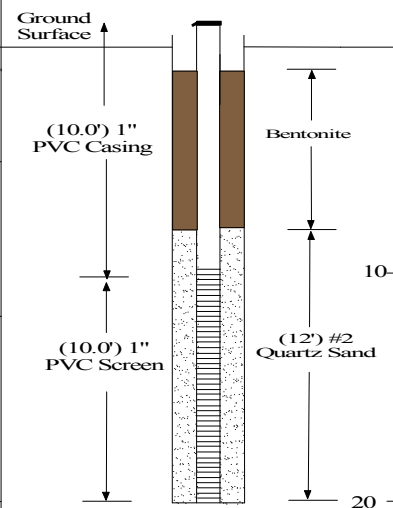
Hole Diameter: 2.5"

Casing Diameter: 1"

Drilling Method: Geoprobe - Direct Push

Total Depth: 20.0'

Remarks: _____

Depth (feet)	Sample ID	Blows	Rec/Adv (in)	PID (ppm)	Water Table	Lithology	Geologic Description	Well Diagram
				2.2			Mottled Reddish Brown to Light Orange Brown Silt	
10				2.7			Reddish Brown fine Sandy Silt	
20				10.6			Light Brown Silty Fine Sand (Moist to Wet)	
							Boring Terminated @ 20 feet bls	
30								
40								
50								
60								

120 Fayette Street
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(336) 722-9999

Project: Former TAMP Facility

Location: Burlington, NC

Date: October 2013

Project Manager: J. Ballsieper

Boring/Well ID:
TW-5

Job No.: 1013130.002

Start Date: 10/30/2013

Complete Date: 10/30/2013

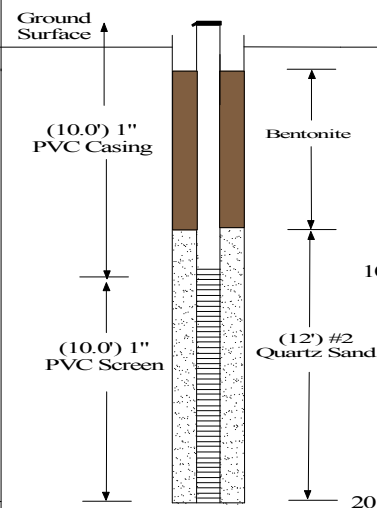
Hole Diameter: 2.5"

Casing Diameter: 1"

Drilling Method: Geoprobe - Direct Push

Total Depth: 20.0'

Remarks: _____

Depth (feet)	Sample ID	Blows	Rec/Adv (in)	PID (ppm)	Water Table	Lithology	Geologic Description	Well Diagram
10				15.5 9.9			Mottled Reddish Brown to Light Orange Brown Silt	
20				9.3			Boring Terminated @ 20 feet bls	
30								
40								
50								
60								

120 Fayette Street
Winston-Salem, North Carolina 27101
(336) 722-9999

Project: Former TAMP Facility

Location: Burlington, NC

Date: October 2013

Project Manager: J. Ballsieper

Boring/Well ID:
TW-6

Job No.: 1013130.002

Start Date: 10/30/2013

Complete Date: 10/30/2013

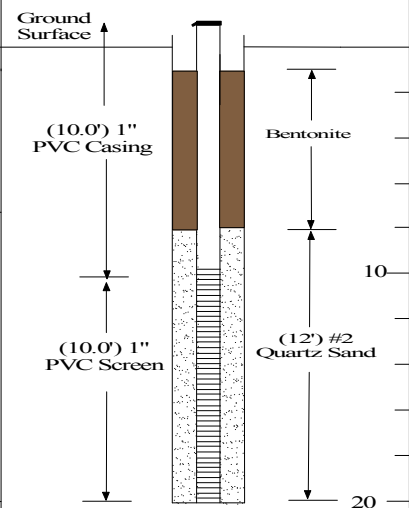
Hole Diameter: 2.5"

Casing Diameter: 1"

Drilling Method: Geoprobe - Direct Push

Total Depth: 20.0'

Remarks: _____

Depth (feet)	Sample ID	Blows	Rec/Adv (in)	PID (ppm)	Water Table	Lithology	Geologic Description	Well Diagram
				47.8			Reddish Brown to Light Orange Brown Silty Fine Sand	
10				124.1			Reddish Brown to Light Orange Brown Silt (Moist)	
20				93.0			Boring Terminated @ 20 feet bls	
30								
40								
50								
60								

120 Fayette Street
Winston-Salem, North Carolina 27101
(336) 722-9999

Project: Former TAMP Facility

Location: Burlington, NC

Date: October 2013

Project Manager: J. Ballsieper

Boring/Well ID:
TW-7

Job No.: 1013130.002

Start Date: 10/30/2013

Complete Date: 10/30/2013

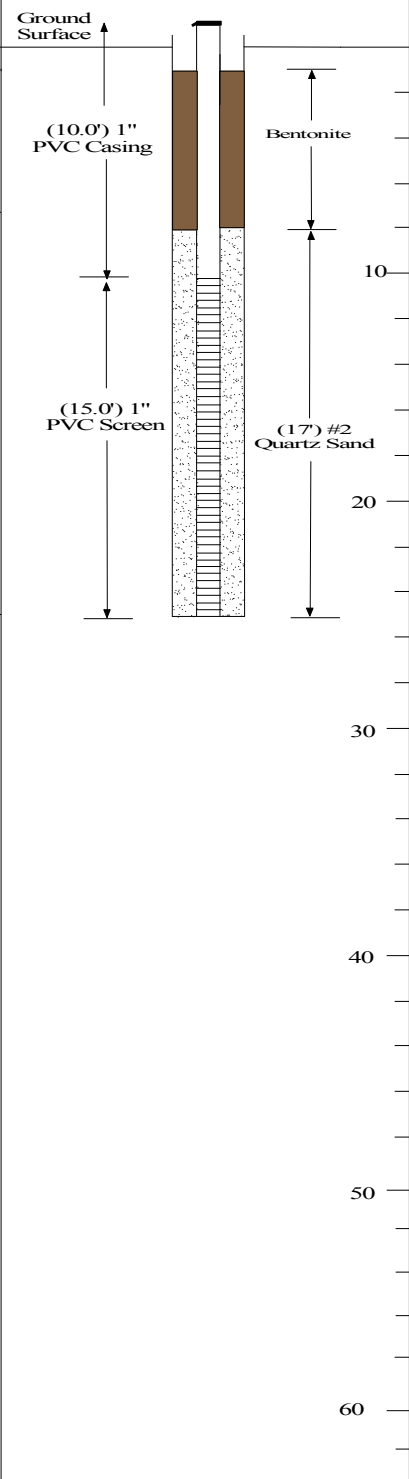
Hole Diameter: 2.5"

Casing Diameter: 1"

Drilling Method: Geoprobe - Direct Push

Total Depth: 25.0'

Remarks: _____

Depth (feet)	Sample ID	Blows	Rec/Adv (in)	PID (ppm)	Water Table	Lithology	Geologic Description	Well Diagram
				44.5			Reddish Brown to Light Orange Brown Silty Fine Sand	
10				131.9				
20				231.5			Light Brown Fine to Medium Sand (Moist)	
30							Boring Terminated @ 25 feet bls	
40								
50								
60								

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(336) 722-9999

Project: Former TAMP Facility

Location: Burlington, NC

Date: October 2013

Project Manager: J. Ballsieper

Boring/Well ID:
TW-8

Job No.: 1013130.002

Start Date: 10/30/2013

Complete Date: 10/30/2013

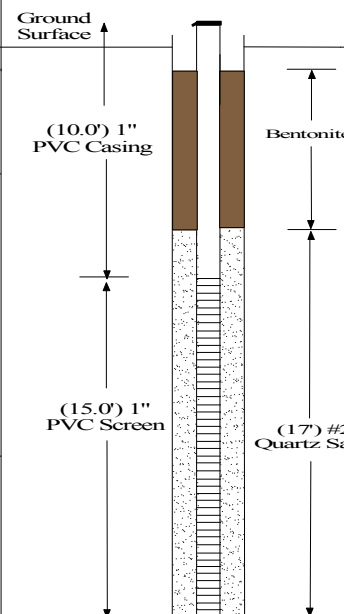
Hole Diameter: 2.5"

Casing Diameter: 1"

Drilling Method: Geoprobe - Direct Push

Total Depth: 25.0'

Remarks: _____

Depth (feet)	Sample ID	Blows	Rec/Adv (in)	PID (ppm)	Water Table	Lithology	Geologic Description	Well Diagram
				83.7			Dark Gray Fine Sand w/gravel (Petroleum Odor)	
10				308.5			Brownish Orange Fine Sand (Petroleum Odor)	
20				5,000+			Light Brown Fine to Medium Sand (Moist)	
30				1,685			Boring Terminated @ 25 feet bls	
40								
50								
60								

120 Fayette Street
Winston-Salem, North Carolina 27101
(336) 722-9999

Project: Former TAMP Facility

Location: Burlington, NC

Date: October 2013

Project Manager: J. Ballsieper

Boring/Well ID:
TW-9

Job No.: 1013130.002

Start Date: 10/30/2013

Complete Date: 10/30/2013

Hole Diameter: 2.5"

Casing Diameter: 1"

Drilling Method: Geoprobe - Direct Push

Total Depth: 25.0'

Remarks: _____

Depth (feet)	Sample ID	Blows	Rec/Adv (in)	PID (ppm)	Water Table	Lithology	Geologic Description	Well Diagram
				167.1			Brownish Orange Silty Fine Sand	
10				397			Reddish Brown Fine Sandy Silt	
20				392			Light Brown Fine to Medium Sand (Moist)	
				N/A			Boring Terminated @ 25 feet bls	
30								
40								
50								
60								

LABORATORY ANALYTICAL REPORTS



RESEARCH & ANALYTICAL LABORATORIES, INC.

Analytical/Process Consultations



Chemical Analysis for Selected Parameters and Sampling Locations Identified as TAMP (A Progress Environmental Project, collected 02 October 2013)

I. Volatile Organics	Quantitation	S1-5	S2-5	S3-5	S4-5	SS-5	TW1-5	TW2-5	TW3-5
EPA Method 8260 B	Limit								
<u>Parameter</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>
Acetone	0.100	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Bromobenzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Bromochloromethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Bromodichloromethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Bromoform	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Bromomethane	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Butanone	0.100	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
N-Butylbenzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Sec-Butylbenzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Tert-Butylbenzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Carbon Tetrachloride	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Chlorobenzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Dibromochloromethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Chloroethane	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Chloroform	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Chloromethane	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Chlorotoluene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
4-Chlorotoluene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dibromoethane (EDB)	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dichlorobenzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,3-Dichlorobenzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,4-Dichlorobenzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Dichlorodifluoromethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1-Dichloroethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dichloroethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1-Dichloroethene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Cis-1,2-Dichloroethene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Trans-1,2-Dichloroethene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dichloropropane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,3-Dichloropropane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2,2-Dichloropropane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1-Dichloropropane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Cis-1,3-Dichloropropene	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Trans-1,3-Dichloropropene	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Ethyl Acetate	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Ethyl Benzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Hexanone	0.050	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1-Propylbenzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Isopropyl ether (IPE)	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
p-Isopropyltoluene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Methylene Chloride	0.020	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
4-Methyl-2-Pentanone	0.100	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Methyl-Tert-Butyl ether (MTBE)	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Naphthalene	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
N-Propylbenzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Styrene	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1,2,2-Tetrachloroethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Tetrachloroethene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Toluene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1,1-Trichloroethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1,2-Trichloroethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Trichloroethene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Trichlorofluoromethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2,3-Trichlorobenzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2,4-Trichlorobenzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2,3-Trichloropropane	0.015	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2,4-Trimethylbenzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,3,5-Trimethylbenzene	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Vinyl Acetate	0.050	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Vinyl Chloride	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Total Xylenes	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Carbon Disulfide	0.100	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Acrylonitrile	0.200	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Trans-1,4-Dichloro-2-butene	0.100	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Methyl Iodide	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Dibromomethane	0.010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1,1,2-Tetrachloroethane	0.005	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Ethanol	0.100	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dibromo-3-Chloropropane(DBCP)	0.025	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Dilution Factor		1	1	1	1	1	1	1	1
Sample Number		769362	769363	769364	769365	769366	769367	769368	769369
Sample Date		10/02/13	10/02/13	10/02/13	10/02/13	10/02/13	10/02/13	10/02/13	10/02/13
Sample Time (hrs)		1040	1050	1058	1112	1130	1245	1315	1340
Date Analyzed		10/04/13	10/04/13	10/04/13	10/04/13	10/04/13	10/04/13	10/04/13	10/04/13
Time Analyzed		1703	1735	1806	1836	1909	1941	2012	2044
Surrogate Recovery (DBFM)	Range (70-130%)	104%	106%	105%	108%	107%	111%	108%	111%
Surrogate Recovery (Toluene-d8)	Range (70-130%)	117%	119%	117%	111%	110%	112%	109%	106%
Surrogate Recovery (4-BFB)	Range (70-130%)	98%	97%	95%	96%	100%	99%	96%	101%



Chemical Analysis for Selected Parameters and Sampling Locations Identified as TAMP

(A Progress Environmental Project, collected 02 October 2013)

II. Semi-Volatile Organics	Quantitation	S1-5	S2-5	S3-5	S4-5	S5-5	TW1-5	TW2-5	TW3-5
EPA Method 8270 BNA	Limit								
Parameter	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Acenaphthene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Acenaphthylene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Anthracene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzoic Acid	6.67	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzo(a)anthracene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzo(b)fluoranthene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzo(k)fluoranthene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzo(ghi)perylene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzo(a)pyrene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzyl Alcohol	3.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Bis(2-chloroethoxy)methane	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Bis(2-chloroethyl)ether	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Bis(2-chloroisopropyl)ether	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Bis(2-ethyl-hexyl)phthalate	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
4-Bromophenyl phenyl ether	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzyl butyl phthalate	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
4-Chloroaniline	1.65	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
4-Chloro-3-methylphenol	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Chloronaphthalene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Chlorophenol	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
4-Chlorophenyl phenyl ether	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Chrysene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Dibenzo(a,h)anthracene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Dibenzofuran	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Di-N-Butyl phthalate	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dichlorobenzene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,3-Dichlorobenzene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,4-Dichlorobenzene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
3,3-Dichlorobenzidine	0.66	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2,4-Dichlorophenol	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Diethyl phthalate	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2,4-Dimethylphenol	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Dimethyl phthalate	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
4,6-Dinitro-2-methylphenol	1.65	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2,4-Dinitrophenol	1.65	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2,4-Dinitrotoluene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2,6-Dinitrotoluene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Di-N-Octyl phthalate	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Azobenzene	3.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Fluoranthene	0.33	BQL	0.044 J	BQL	BQL	BQL	BQL	BQL	BQL
Fluorene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Hexachlorobenzene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Hexachlorobutadiene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Hexachlorocyclopentadiene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Hexachloroethane	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Indeno(1,2,3-cd) pyrene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Isophorone	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Methylnaphthalene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Methylphenol	1.65	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
4-Methylphenol	1.65	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Nitrobenzene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Nitrophenol	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
4-Nitrophenol	1.65	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
N-Nitrosodiphenylamine	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
N-nitrosodi-n-propylamine	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Pentachlorophenol	1.65	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Phenanthrene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Phenol	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Pyrene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2,4-Trichlorobenzene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2,4,6-Trichlorophenol	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Methyl-4,6-dinitrophenol	1.65	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Benzidine	1.65	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Diphenylhydrazine	1.65	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
N-Nitrosodimethylamine	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Napthalene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1-methyl naphthalene	0.33	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Dilution Factor		1	1	1	1	1	1	1	1
Sample Number		769362	769363	769364	769365	769366	769367	769368	769369
Sample Date		10/02/13	10/02/13	10/02/13	10/02/13	10/02/13	10/02/13	10/02/13	10/02/13
Sample Time (hrs)		1040	1050	1058	1112	1130	1245	1315	1340
Date Extracted		10/04/13	10/04/13	10/04/13	10/04/13	10/04/13	10/04/13	10/04/13	10/04/13
Date Analyzed		10/08/13	10/08/13	10/08/13	10/08/13	10/08/13	10/08/13	10/08/13	10/08/13
Time Analyzed		1541	1628	1713	1758	1844	1928	2059	2014
Surrogate Recovery	Range								
(2-Fluorophenol)	(21-110%)	48%	45%	49%	63%	63%	58%	59%	60%
(Phenol-d6)	(10-110%)	43%	43%	46%	58%	59%	55%	54%	57%
(Nitrobenzene-d5)	(35-114%)	58%	56%	62%	78%	77%	72%	74%	71%
(2,4,6-Tribromophenol)	(10-123%)	52%	48%	49%	64%	69%	68%	68%	69%
(2-Fluorobiphenyl)	(43-116%)	62%	61%	69%	84%	82%	80%	84%	81%
(4-Terphenyl-d14)	(33-141%)	69%	61%	64%	80%	83%	81%	92%	86%



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Analytical/Process Consultations



Chemical Analysis for Selected Parameters and Sampling Locations Identified as TAMP (A Progress Environmental Project, collected 02 October 2013)

III. Priority Pollutant	S1-5	S2-5	S3-5	S4-5	S5-5	TW1-5	TW2-5	TW3-5
Metals								
<u>Parameter</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>
Silver, Total	<1.35	<1.17	<1.19	<1.37	<1.20	<1.22	<1.10	<1.24
Arsenic, Total	<1.35	<1.17	<1.19	<1.37	<1.20	<1.22	<1.10	<1.24
Beryllium, total	0.178	0.456	0.182	0.654	0.408	0.169	0.418	0.690
Cadmium, Total	<0.135	<0.117	<0.119	<0.137	<0.120	<0.122	<0.110	<0.124
Chromium, Total	14.3	30.9	11.7	39.9	7.07	8.36	59.9	95.4
Copper, Total	21.3	43.4	8.41	64.4	14.0	8.43	22.2	48.2
Mercury, Total	0.057	0.068	0.035	<0.045	<0.037	<0.037	0.042	<0.041
Nickel, Total	3.17	8.80	2.65	4.24	3.80	2.31	25.4	45.0
Lead, Total	6.86	5.04	3.08	10.4	7.83	2.70	<0.551	<0.618
Antimony, Total	<6.75	<5.86	<5.97	<6.84	<6.00	<6.11	<5.51	<6.18
Selenium, Total	<1.35	<1.17	<1.19	<1.37	<1.20	<1.22	<1.10	<1.24
Thallium, Total	<1.35	<1.17	<1.19	<1.37	<1.20	<1.22	<1.10	<1.24
Zinc, Total	10.0	29.5	11.9	20.8	30.1	11.2	58.2	153
Sample Number:	769362	769363	769364	769365	769366	769367	769368	769369
Sample Collected Date:	10/02/13	10/02/13	10/02/13	10/02/13	10/02/13	10/02/13	10/02/13	10/02/13
Sample Collected Time (Hrs):	1040	1050	1058	1112	1130	1245	1315	1340

mg/kg = milligrams per kilogram = parts per million

BQL = Below Quantitation Limit



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Analytical/Process Consultations



*Chemical Analysis for PCB's by EPA Method 8082
(A Progress Environmental Project Identified as TAMP
Collected 02 October 2013)*

<u>I. Sample Location</u>	<u>Sample Number</u>	<u>Sampling Date</u>	<u>Sampling Time</u>	<u>PCB 1016 (mg/kg)</u>	<u>PCB 1221 (mg/kg)</u>	<u>PCB 1232 (mg/kg)</u>	<u>PCB 1242 (mg/kg)</u>	<u>PCB 1248 (mg/kg)</u>	<u>PCB 1254 (mg/kg)</u>	<u>PCB 1260 (mg/kg)</u>
S1-5	769362	10/02/13	1040	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
S2-5	769363	10/02/13	1050	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
S3-5	769364	10/02/13	1058	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
S4-5	769365	10/02/13	1112	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
S5-5	769366	10/02/13	1130	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
TW1-5	769367	10/02/13	1245	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
TW2-5	769368	10/02/13	1315	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
TW3-5	769369	10/02/13	1340	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

mg/kg = milligrams per kilogram

PCB = Polychlorinated Biphenyl

BQL = Below Quantitation Limits

< = less than or below quantitation limits



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Phone (336) 996-2841

CHAIN OF CUSTODY RECORD

COMPANY		STREET ADDRESS		CITY, STATE, ZIP		CONTACT		PHONE		JOB NO.		PROJECT		SAMPLER NAME (PLEASE PRINT)		SAMPLER SIGNATURE		NO. OF CONTAINERS		WATER / WASTEWATER												MISC.		REQUESTED ANALYSIS	
SAMPLE NUMBER (LAB USE ONLY)	DATE	TIME	COMP	GRAB	TEMP °C	RES CL	CHLORINE REMOVED (Y or N)	SAMPLE MATRIX (S or W)	SAMPLE LOCATION / I.D.		2L G (BNA, Herb. / Pest.) 2 40ml Vials (VOA) HCL 250ml G (TOX) 250ml P (TOC) 1L P.G (BOD, TSS, Unpreserved, etc.) 1L G (Phenol, Oil & Grease) 1L P.G (COD, N, P) 1L P.G (Metals, Hardness) Sterile P.G (CYANIDE) HNO ₃ Sterile P.G (Coliform)																								
7109302	10/2/13	1040		X				S	S1-S		6																		8260, 8270, PP metals, Pb, B ₅						
303		1050							S2-S																										
304		1058							S3-S																										
305		11:12							S4-S																										
306		11:30							S5-S																										
307		12:45							TW1-S																										
308		1:15							TW2-S																										
309		1:40							TW3-S																										
RELINQUISHED BY										DATE/TIME		RECEIVED BY		REMARKS:																					
J. R.										10/2/13 205		Michelle		SAMPLE TEMPERATURE AT RECEIPT 2.8 °C																					
RELINQUISHED BY										DATE/TIME		RECEIVED BY																							



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Eight (8) soil samples were received in good condition on 03 October 2013. The samples were analyzed without difficulties unless noted below.

EPA 8270: One (1) Internal Standard is outside laboratory QA/QC range for RAL sample #769368 (TW2-5). The sample was re-extracted for confirmation. No target compounds were detected.

Sidney L. Champion
Director of Laboratory Services

10-14-13
Date

QA/QC Summary

Method 8260 (50/100/500/1000 PPB QC)

FILE NAME: SLC1004

CLIENT: PROGRESS ENVIROMENTAL (PROJECT : TAMP)

Sample ID	769362-369								Page 1 of 2
Extraction Method	5035					VOA INSTRUMENT(MS-2)			
Date Extracted	N/A								
Weight/Volume Used	5G/5ML								
Final Volume	5G/5ML								
Date Analyzed	10/04/13								
% Surrogate Recovery	90	117	98						
Acceptance Range	(70 - 130)	(70 - 130)	(70 - 130)						
Compound	MDL mg/kg	Method Blank	LCS % Recovery	LCS Acceptance Range	MS % Rec. *	MSD % Rec. *	RPD	RPD	QC LIMITS
									PERCENT RECOVERY
Dichlorodifluoromethane	0.00047	ND	82	56 - 126					
Chloromethane	0.00050	ND	96	62 - 133					
Vinyl Chloride	0.00059	ND	98	67 - 136					
Bromomethane	0.00028	ND	83	72 - 130					
Chloroethane	0.00029	ND	92	73 - 138					
Trichlorofluoromethane	0.00037	ND	82	78 - 131					
Acetone	0.00159	ND	78	62 - 119					
Acrylonitrile	0.00036	ND	88	76 - 135					
2-Butanone	0.00152	ND	92	62 - 122					
1,1-Dichloroethene	0.00059	ND	94	82 - 133	95	96	1	14	61-145
Methyl Iodide	0.00307	ND	108	70 - 136					
Carbon Disulfide	0.00042	ND	94	76 - 132					
Methylene Chloride	0.00138	ND	95	68 - 135					
Trans-1,2-Dichloroethene	0.00107	ND	96	80 - 134					
1,1-Dichloroethane	0.00036	ND	95	74 - 140					
Isopropyl ether (IPE)	0.00024	ND	99	67 - 139					
Methyl-Tert-Butyl ether (MTBE)	0.00032	ND	87	68 - 131					
Vinyl Acetate	0.00035	ND	85	67 - 127					
Cis-1,2-Dichloroethene	0.00031	ND	99	78 - 133					
2,2-Dichloropropane	0.00029	ND	86	72 - 123					
Bromochloromethane	0.00049	ND	97	71 - 139					
Chloroform	0.00029	ND	90	81 - 126					
1,1,1-Trichloroethane	0.00028	ND	84	76 - 129					
Carbon Tetrachloride	0.00081	ND	87	81 - 133					
1,1-Dichloropropene	0.00059	ND	93	80 - 135					
Benzene	0.00038	ND	96	78 - 131	106	108	2	11	76-127
Ethyl Acetate	0.00074	ND	92	63 - 122					
1,2-Dichloroethane	0.00055	ND	85	72 - 132					
Trichloroethene(TCE)	0.00028	ND	97	79 - 126	100	100	1	14	71-120
1,2-Dichloropropane	0.00023	ND	102	79 - 126					
Dibromomethane	0.00043	ND	94	71 - 129					

COMMENTS:

QA/QC Summary

Method 8260 (50/100/500/1000 PPB QC)
FILE NAME: SLC1004
Page 2 of 2
CLIENT: PROGRESS ENVIROMENTAL (PROJECT : TAMP)

Sample ID:	769362-369			LCS				QC LIMITS	
Compound	MDL mg/kg	Method Blank	LCS % Recovery	Acceptance Range	MS % Rec. *	MSD % Rec. *	RPD	RPD	PERCENT RECOVERY
Bromodichloromethane	0.00026	ND	90	71 - 126					
4-Methyl-2-Pentanone	0.00052	ND	121	67 - 122					
Cis-1,3-Dichloropropene	0.00023	ND	118	70 - 125					
Toluene	0.00027	ND	111	65 - 139	107	111	4	13	76-125
Trans-1,3-Dichloropropene	0.00052	ND	107	65 - 131					
1,1,2-Trichloroethane	0.00041	ND	107	64 - 137					
Tetrachloroethene(PCE)	0.00026	ND	88	61 - 164					
2-Hexanone	0.00050	ND	105	63 - 118					
Dibromochloromethane	0.00037	ND	102	60 - 138					
1,3-Dichloropropane	0.00033	ND	110	64 - 135					
1,2-Dibromoethane (EDB)	0.00074	ND	110	68 - 131					
Chlorobenzene	0.00029	ND	92	87 - 121	97	96	1	13	75-130
1,1,1,2-Tetrachloroethane	0.00041	ND	91	85 - 131					
Ethyl Benzene	0.00028	ND	92	91 - 121					
Total Xylenes	0.00056	ND	97	88 - 127					
Styrene	0.00037	ND	97	88 - 124					
Bromoform	0.00045	ND	96	66 - 133					
Isopropylbenzene	0.00027	ND	97	90 - 125					
Bromobenzene	0.00028	ND	93	81 - 128					
1,2,3-Trichloropropane	0.00043	ND	106	66 - 132					
Trans-1,4-Dichloro-2-butene	0.00050	ND	93	77 - 120					
N-Propylbenzene	0.00058	ND	94	88 - 123					
2-Chlorotoluene	0.00050	ND	92	86 - 126					
4-Chlorotoluene	0.00042	ND	91	82 - 125					
1,3,5-Trimethylbenzene	0.00054	ND	94	89 - 124					
Tert-Butylbenzene	0.00029	ND	93	89 - 128					
1,2,4-Trimethylbenzene	0.00056	ND	93	87 - 125					
Sec-Butylbenzene	0.00042	ND	94	88 - 127					
1,3-Dichlorobenzene	0.00041	ND	102	79 - 127					
1,1,2,2-Tetrachloroethane	0.00078	ND	90	72 - 128					
p-Isopropyltoluene	0.00048	ND	91	86 - 128					
1,4-Dichlorobenzene	0.00042	ND	94	80 - 122					
1,2-Dichlorobenzene	0.00039	ND	95	80 - 123					
N-Butylbenzene	0.00033	ND	93	84 - 127					
1,2-Dibromo-3-Chloropropane(DBC)	0.00067	ND	95	66 - 125					
1,2,4-Trichlorobenzene	0.00025	ND	103	76 - 117					
Naphthalene	0.00047	ND	108	79 - 119					
1,2,3-Trichlorobenzene	0.00036	ND	103	72 - 118					

COMMENTS:

QA/QC Summary

Method: 8270 (100/200 PPB QC)
FILE NAME: SLC1008-MS3
Page 2 of 2
CLIENT: PROGRESS ENVIRONMENTAL (PROJECT:TAMP)

Compound	MDL mg/kg	Method Blank	LCS % Recovery	LCS Acceptr ange	MS % Rec.	MSD % Rec.	RPD	QC LIMITS	
2-Methyl-4,6-Dinitrophenol	0.170	ND	88	64-140				RPD	% REC
4-Nitrophenol	0.232	ND	85	50-140	49	53	8	50	10-80
Hexachlorocyclopentadiene	0.079	ND	87	12-129					
2-Chloronaphthalene	0.046	ND	81	46-127					
Dimethyl phthalate	0.066	ND	80	51-113					
Acenaphthylene	0.066	ND	76	41-128					
2,6-Dinitrotoluene	0.075	ND	80	58-120					
Acenaphthene	0.057	ND	84	49-129	74	75	1	31	46-118
2,4-Dinitrotoluene	0.079	ND	87	53-123	69	69	1	38	24-96
Fluorene	0.060	ND	81	49-127					
Diethyl phthalate	0.072	ND	79	47-117					
4-Chlorophenyl phenyl ether	0.050	ND	82	46-134					
2,4-Dinitrophenol	0.188	ND	93	45-147					
Azobenzene	0.083	ND	84	45-117					
Pentachlorophenol	0.129	ND	93	64-144	65	63	4	50	9-103
N-Nitrosodiphenylamine	0.066	ND	83	2-127					
4-Bromophenyl phenyl ether	0.085	ND	89	50-130					
Hexachlorobenzene	0.069	ND	85	50-131					
Phenanthrene	0.075	ND	83	50-135					
Anthracene	0.072	ND	80	57-131					
Di-N-Butyl phthalate	0.097	ND	80	47-115					
Fluoranthene	0.085	ND	78	47-128					
Benzidine	0.048	ND	39	D-150					
Pyrene	0.038	ND	87	56-120	79	81	3	31	26-127
Benzyl butyl phthalate	0.060	ND	87	55-122					
Benzo(a)anthracene	0.050	ND	87	62-119					
3,3-Dichlorobenzidine	0.122	ND	45	D-114					
Chrysene	0.060	ND	88	60-124					
Bis(2-ethyl-hexyl)phthalate	0.066	ND	84	46-124					
Di-N-Octyl phthalate	0.079	ND	86	49-131					
Benzo(b)fluoranthene	0.122	ND	112	60-132					
Benzo(k)fluoranthene	0.110	ND	62	39-137					
Benzo(a)pyrene	0.047	ND	88	63-126					
Indeno(1,2,3-cd) pyrene	0.094	ND	78	39-159					
Dibenzo(a,h)anthracene	0.088	ND	73	20-158					
Benzo(g,h,i)perylene	0.097	ND	73	40-158					

N/A = Data Not Available
*** = OUT OF RANGE**

QA/QC Summary

Method 8082

Page 1 of 1

Project: *Progress Environmental, Inc. - TAMP*

Sample ID	769362-369									
Date Analyzed	10/9/2013									
% Surrogate Recovery	97	100								
Acceptance Limits	(70-130)	(70-130)								

Compound	MDL ug/kg	Method Blank	Trip/Field Blank	LCS % Recovery	LCS Acceptance Range	MS	MSD	RPD	QC Limits	
									RPD	MS & MSD
Aroclor-1016	0.003	BQL	N/A	94	70-130	101	95	6.12	30.0	65-135
Aroclor-1221	0.003	BQL	N/A	N/A	70-130					
Aroclor-1232	0.003	BQL	N/A	N/A	70-130					
Aroclor-1242	0.003	BQL	N/A	N/A	70-130					
Aroclor-1248	0.003	BQL	N/A	N/A	70-130					
Aroclor-1254	0.003	BQL	N/A	N/A	70-130					
Aroclor-1260	0.003	BQL	N/A	94	70-130	101	95	6.12	30.0	65-135

* QC outside of established control limits



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Quality Control Summary Results for Project Identified as TAMP) (A Progress Environmental Project)

<u>Parameter</u>	<u>Prep Blank</u>	<u>ICV % Recovery</u>	<u>Spike % Recovery</u>	<u>Duplicate % RSD</u>
Silver, Total	BDL	102	106	1
Arsenic, Total	BDL	98	103	2
Beryllium, Total	BDL	93	101	<1
Cadmium, Total	BDL	100	102	2
Chromium, Total	BDL	102	104	<1
Copper, Total	BDL	104	105	<1
Mercury, Total	BDL	100	93	2
Nickel, Total	BDL	103	101	2
Lead, Total	BDL	109	106	2
Antimony, Total	BDL	98	100	2
Selenium, Total	BDL	98	103	1
Thallium, Total	BDL	110	105	2
Zinc, Total	BDL	101	99	2

COMMENTS:

Corresponding Sample Numbers: 769362-69

% = Percent

ICV = Initial Calibration Verification



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Chemical Analysis for Selected Parameters and Water Sample Identified as TAMP (A Progress Environmental Project, collected 03 October 2013)

I. Volatile Organics	Quantitation	TW-1	TW-2	TW-3	MWC-1
EPA Method 6200 B	Limit				
Parameter	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
Acetone	25	BQL	BQL	BQL	BQL
Acrolein	100	BQL	BQL	BQL	BQL
Acrylonitrile	100	BQL	BQL	BQL	BQL
Benzene	0.5	1,490	BQL	BQL	BQL
Bromobenzene	0.5	BQL	BQL	BQL	BQL
Bromochloromethane	0.5	BQL	BQL	BQL	BQL
Bromodichloromethane	0.5	BQL	BQL	BQL	BQL
Bromoform	1.0	BQL	BQL	BQL	BQL
Bromomethane	1.0	BQL	BQL	BQL	BQL
2-Butanone	25	BQL	BQL	BQL	BQL
Carbon Disulfide	5.0	BQL	BQL	BQL	BQL
Carbon Tetrachloride	0.5	BQL	BQL	BQL	BQL
Chlorobenzene	0.5	BQL	BQL	BQL	BQL
Chloroethane	1.0	BQL	BQL	BQL	BQL
2-Chloroethyl vinyl ether	5.0	BQL	BQL	BQL	BQL
Chloroform	0.5	BQL	BQL	BQL	BQL
Chloromethane	1.0	BQL	BQL	BQL	BQL
2-Chlorotoluene	0.5	BQL	BQL	BQL	BQL
4-Chlorotoluene	0.5	BQL	BQL	BQL	BQL
Cis-1,2-Dichloroethene	0.5	BQL	BQL	BQL	BQL
Cis-1,3-Dichloropropene	0.5	BQL	BQL	BQL	BQL
1,2-Dibromo-3-Chloropropane(DBCP)	5.0	BQL	BQL	BQL	BQL
1,2-Dibromoethane (EDB)	0.5	BQL	BQL	BQL	BQL
Dibromochloromethane	0.5	BQL	BQL	BQL	BQL
Dibromomethane	0.5	BQL	BQL	BQL	BQL
1,2-Dichlorobenzene	0.5	BQL	BQL	BQL	BQL
1,3-Dichlorobenzene	0.5	BQL	BQL	BQL	BQL
1,4-Dichlorobenzene	0.5	BQL	BQL	BQL	BQL
1,1-Dichloroethane	0.5	BQL	BQL	BQL	BQL
1,2-Dichloroethane	0.5	7.92	BQL	BQL	BQL
1,1-Dichloroethene	0.5	BQL	BQL	BQL	BQL
Dichlorofluoromethane	0.5	BQL	BQL	BQL	BQL
1,2-Dichloropropane	0.5	BQL	BQL	BQL	BQL
1,3-Dichloropropane	0.5	BQL	BQL	BQL	BQL
2,2-Dichloropropane	0.5	BQL	BQL	BQL	BQL
1,1-Dichloropropene	0.5	BQL	BQL	BQL	BQL
Ethyl Benzene	0.5	0.2 J	BQL	BQL	BQL
2-Hexanone	5.0	BQL	BQL	BQL	BQL
IPE	0.5	BQL	BQL	BQL	BQL
1-Propylbenzene	0.5	13.3	BQL	BQL	BQL
4-Methyl-2-Pentanone	5.0	BQL	BQL	BQL	BQL
Methyl Iodide	1.0	BQL	BQL	BQL	BQL
Methylene Chloride	5.0	BQL	BQL	BQL	BQL
MTBE	0.5	BQL	BQL	BQL	BQL
Naphthalene	0.5	25.4	BQL	BQL	BQL
N-Butylbenzene	0.5	0.41 J	BQL	BQL	BQL
N-Propylbenzene	0.5	2.20	BQL	BQL	BQL
p-Isopropyltoluene	0.5	BQL	BQL	BQL	BQL
Sec-Butylbenzene	0.5	0.97	BQL	BQL	BQL
Styrene	0.5	BQL	BQL	BQL	BQL
Tert-Butylbenzene	0.5	0.29 J	BQL	BQL	BQL
1,1,1,2-Tetrachloroethane	0.5	BQL	BQL	BQL	BQL
1,1,2,2-Tetrachloroethane	0.5	BQL	BQL	BQL	BQL
Tetrachloroethene	0.5	BQL	BQL	BQL	BQL
Toluene	0.5	0.64	BQL	BQL	BQL
Trans-1,2-Dichloroethene	0.5	BQL	BQL	BQL	BQL
Trans-1,3-Dichloropropene	0.5	BQL	BQL	BQL	BQL
Trans-1,4-Dichloro-2-butene	5.0	BQL	BQL	BQL	BQL
1,2,3-Trichlorobenzene	0.5	BQL	BQL	BQL	BQL
1,2,4-Trichlorobenzene	0.5	BQL	BQL	BQL	BQL
1,1,1-Trichloroethane	0.5	BQL	BQL	BQL	BQL
1,1,2-Trichloroethane	0.5	BQL	BQL	BQL	BQL
Trichloroethene	0.5	BQL	BQL	BQL	BQL
Trichlorofluoromethane	0.5	BQL	BQL	BQL	BQL
1,2,3-Trichloropropane	0.5	BQL	BQL	BQL	BQL
1,2,4-Trimethylbenzene	0.5	BQL	BQL	BQL	BQL
1,3,5-Trimethylbenzene	0.5	BQL	BQL	BQL	BQL
Vinyl Acetate	1.0	BQL	BQL	BQL	BQL
Vinyl Chloride	0.5	BQL	BQL	BQL	BQL
Total Xylenes	1.0	0.32 J	BQL	BQL	BQL
Ethanol	100	BQL	BQL	BQL	BQL
Tert-butyl Alcohol	50.0	BQL	BQL	BQL	BQL
Ethyl Tertbutyl Ether	0.5	BQL	BQL	BQL	BQL
Terty-butyl Formate	5.0	BQL	BQL	BQL	BQL
Tert-amyl Alcohol	50.0	BQL	BQL	BQL	BQL
Tert-Amyl Methyl Ether	0.5	BQL	BQL	BQL	BQL
Dilution Factor		1	1	1	1
Sample Number		769515	769516	769517	769518
Sample Date		10/03/13	10/03/13	10/03/13	10/03/13
Sample Time (hrs)		1140	1215	1035	1100
Date Analyzed		10/11/13	10/11/13	10/11/13	10/11/13
Time Analyzed		1414	1517	1548	1640
Surrogate Recovery	Range				
DBFM	(70-130%)	104%	105%	105%	107%
Toluene-d8	(70-130%)	96%	98%	94%	95%
4-BFB	(70-130%)	99%	97%	102%	99%

BQL = Below Quantitation Limits

J = Estimated concentration, present but below quantization limit



RESEARCH & ANALYTICAL LABORATORIES, Inc.

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Chemical Analysis for Selected Parameters and Water Sample Identified as TAMP (A Progress Environmental Project, collected 03 October 2013)

II. Semi-Volatile Organics EPA Method 625 BNA Parameter	Quantitation Limit (ppb)	TW-1 (ppb)	TW-2 (ppb)	TW-3 (ppb)	MWC-1 (ppb)
4-Chloro-3-methylphenol	10.0	BQL	BQL	BQL	BQL
2-Chlorophenol	10.0	BQL	BQL	BQL	BQL
2,4-Dichlorophenol	10.0	BQL	BQL	BQL	BQL
2,4-Dimethylphenol	10.0	BQL	BQL	BQL	BQL
2,4-Dinitrophenol	50.0	BQL	BQL	BQL	BQL
2-Methyl-4,6-dinitrophenol	50.0	BQL	BQL	BQL	BQL
2-Nitrophenol	10.0	BQL	BQL	BQL	BQL
4-Nitrophenol	50.0	BQL	BQL	BQL	BQL
Pentachlorophenol	50.0	BQL	BQL	BQL	BQL
Phenol	10.0	BQL	BQL	BQL	BQL
2,4,6-Trichlorophenol	10.0	BQL	BQL	BQL	BQL
Acenaphthene	10.0	BQL	BQL	BQL	BQL
Acenaphthylene	10.0	BQL	BQL	BQL	BQL
Anthracene	10.0	BQL	BQL	BQL	BQL
Benzidine	50.0	BQL	BQL	BQL	BQL
Benzo(a)anthracene	10.0	BQL	BQL	BQL	BQL
Benzo(a)pyrene	10.0	BQL	BQL	BQL	BQL
Benzo(b)fluoranthene	10.0	BQL	BQL	BQL	BQL
Benzo(ghi)perylene	10.0	BQL	BQL	BQL	BQL
Benzo(k)fluoranthene	10.0	BQL	BQL	BQL	BQL
Benzyl butyl phthalate	10.0	BQL	BQL	BQL	BQL
Bis(2-chloroethoxy)methane	10.0	BQL	BQL	BQL	BQL
Bis(2-chloroethyl)ether	10.0	BQL	BQL	BQL	BQL
Bis(2-chloroisopropyl)ether	10.0	BQL	BQL	BQL	BQL
Bis(2-ethyl-hexyl)phthalate	10.0	BQL	BQL	BQL	BQL
4-Bromophenyl phenyl ether	10.0	BQL	BQL	BQL	BQL
2-Chloronaphthalene	10.0	BQL	BQL	BQL	BQL
4-Chlorophenyl phenyl ether	10.0	BQL	BQL	BQL	BQL
Chrysene	10.0	BQL	BQL	BQL	BQL
Dibenzo(a,h)anthracene	10.0	BQL	BQL	BQL	BQL
1,2-Dichlorobenzene	10.0	BQL	BQL	BQL	BQL
1,3-Dichlorobenzene	10.0	BQL	BQL	BQL	BQL
1,4-Dichlorobenzene	10.0	BQL	BQL	BQL	BQL
3,3-Dichlorobenzidine	20.0	BQL	BQL	BQL	BQL
Diethyl phthalate	10.0	BQL	BQL	BQL	BQL
Dimethyl phthalate	10.0	BQL	BQL	BQL	BQL
Di-N-Butyl phthalate	10.0	BQL	BQL	BQL	BQL
2,4-Dinitrotoluene	10.0	BQL	BQL	BQL	BQL
2,6-Dinitrotoluene	10.0	BQL	BQL	BQL	BQL
Di-N-Octyl phthalate	10.0	BQL	BQL	BQL	BQL
1,2-Diphenylhydrazine	50.0	BQL	BQL	BQL	BQL
Fluoranthene	10.0	BQL	BQL	BQL	BQL
Fluorene	10.0	BQL	BQL	BQL	BQL
Hexachlorobenzene	10.0	BQL	BQL	BQL	BQL
Hexachlorobutadiene	10.0	BQL	BQL	BQL	BQL
Hexachlorocyclopentadiene	10.0	BQL	BQL	BQL	BQL
Hexachloroethane	10.0	BQL	BQL	BQL	BQL
Indeno(1,2,3-cd)pyrene	10.0	BQL	BQL	BQL	BQL
Isophorone	10.0	BQL	BQL	BQL	BQL
Naphthalene	10.0	101	BQL	BQL	BQL
Nitrobenzene	10.0	BQL	BQL	BQL	BQL
N-Nitrosodimethylamine	10.0	BQL	BQL	BQL	BQL
N-nitrosodi-n-propylamine	10.0	BQL	BQL	BQL	BQL
N-Nitrosodiphenylamine	10.0	BQL	BQL	BQL	BQL
Phenanthrene	10.0	BQL	BQL	BQL	BQL
Pyrene	10.0	BQL	BQL	BQL	BQL
1,2,4-Trichlorobenzene	10.0	BQL	BQL	BQL	BQL
2-Methylnaphthalene	10.0	11.2 J	BQL	BQL	BQL
1-Methylnaphthalene	10.0	8.35 J	BQL	BQL	BQL
Dilution Factor		5	1	1	1
Sample Number		769515	769516	769517	769518
Sample Date		10/03/13	10/03/13	10/03/13	10/03/13
Sample Time (hrs)		1140	1215	1035	1100
Date Extracted		10/07/13	10/07/13	10/07/13	10/07/13
Date Analyzed		10/09/13	10/09/13	10/09/13	10/09/13
Time Analyzed		1629	1715	1801	1847
Surrogate Recovery	Range				
2-Fluorophenol	(5-77%)	44%	49%	48%	46%
Phenol-D6	(7-64%)	24%	33%	33%	28%
Nitrobenzene-D5	(29-149%)	62%	78%	77%	68%
2,4,6-Tribromophenol	(12-123%)	73%	83%	75%	72%
2-Fluorobiphenyl	(10-133%)	76%	75%	72%	72%
4-Terphenyl-D14	(20-133%)	76%	76%	74%	73%

BQL = Below Quantitation Limits

ppb = parts per billion



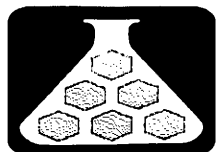
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***Chemical Analysis for Selected Parameters and Sampling Locations Identified as TAMP
(A Progress Environmental Project, collected 03 October 2013)***

III. Priority Pollutant	TW-1	TW-2	TW-3	MWC-1
Metals				
<u>Parameter</u>	<u>(ppb)</u>	<u>(ppb)</u>	<u>(ppb)</u>	<u>(ppb)</u>
Silver, Total	<5.0	<5.0	<5.0	<5.0
Arsenic, Total	<5.0	7.06	<5.0	<5.0
Beryllium, total	<1.0	1.07	<1.0	<1.0
Cadmium, Total	<1.0	<1.0	<1.0	12.3
Chromium, Total	83.0	83.9	63.9	25.4
Copper, Total	118	81.4	57.9	24.3
Mercury, Total	<0.2	<0.2	<0.2	<0.2
Nickel, Total	38.7	36.4	33.9	6.20
Lead, Total	<5.0	<5.0	<5.0	32.2
Antimony, Total	<3.0	<3.0	<3.0	<3.0
Selenium, Total	<5.0	<5.0	<5.0	<5.0
Thallium, Total	<5.0	<5.0	<5.0	<5.0
Zinc, Total	193	91.6	119	214
 Sample Number:	 769515	 769516	 769517	 769518
Sample Collected Date:	10/03/13	10/03/13	10/03/13	10/03/13
Sample Collected Time (Hrs):	1140	1215	1035	1100



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Analytical/Process Consultations



*Chemical Analysis for PCB's by EPA Method 8082
A Progress Environmental Project Identified as TAMP*

October 3, 2013

I. Sample Location	Sample Number	Sampling Date	Sampling Time	PCB	PCB	PCB	PCB	PCB	PCB	PCB
				1016 (mg/L)	1221 (mg/L)	1232 (mg/L)	1242 (mg/L)	1248 (mg/L)	1254 (mg/L)	1260 (mg/L)
TW-1	769515	10/03/13	1140	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TW-2	769516	10/03/13	1215	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
TW-3	769517	10/03/13	1035	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
MCW-1	769518	10/03/13	1100	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

BQL = Below Quantitation Limits

< = less than or below quantitation limits

mg/L = milligrams per liter

PCB = Polychlorinated Biphenyl



CHAIN OF CUSTODY RECORD

[illegible]



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CASE NARRATIVE

**Four (4) water samples were received in good condition on 03 October 2013.
The samples were analyzed without difficulties unless noted below.**

10/14/13

Sidney L. Champion
Director of Laboratory Services

Date

QA/QC Summary

METHOD: 8260/6200B (25 ML PURGE) (5/10/20/50/500/1000 PPB QC)

FILE NAME: WLC1011

CLIENT: PROGRESS ENVIROMENTAL(PROJECT: TAMP)

Sample ID:		769515-518						PAGE 1 OF 2		
Extraction Method	5035									
Date Extracted	N/A									
Volume Used	25 ML									
Final Volume	25 ML									
Date Analyzed	10/11/13									
% Surrogate Recovery	102	94	105							
Acceptance Range	(70-130)	(70-130)	(70-130)							
				LCS					QC LIMITS	
Compound	MDL mg/L	Method Blank	LCS % Recovery	Acceptance Range	MS % Rec. *	MSD % Rec. *	RPD	RPD	PERCENT	
									RECOVERY	
Dichlorodifluoromethane	0.12	ND	96	70 - 130						
Chloromethane	0.07	ND	98	70 - 130						
Vinyl Chloride	0.11	ND	97	70 - 130						
Bromomethane	0.18	ND	94	70 - 130						
Chloroethane	0.11	ND	94	70 - 130						
Trichlorofluoromethane	0.09	ND	108	70 - 130						
Acetone	1.18	ND	100	70 - 130						
Acrylonitrile	12.38	ND	107	70 - 130						
2-Butanone	0.88	ND	105	70 - 130						
1,1-Dichloroethene	0.09	ND	102	70 - 130	83	84	1	14	70 -130	
Methyl Iodide	0.19	ND	88	70 - 130						
Carbon Disulfide	0.45	ND	104	70 - 130						
Methylene Chloride	0.57	ND	99	70 - 130						
Trans-1,2-Dichloroethene	0.10	ND	101	70 - 130						
1,1-Dichloroethane	0.17	ND	103	70 - 130						
Isopropyl ether (IPE)	0.12	ND	107	70 - 130						
Methyl-Tert-Butyl ether (MTBE)	0.16	ND	99	70 - 130						
Vinyl Acetate	0.24	ND	105	70 - 130						
Cis-1,2-Dichloroethene	0.09	ND	104	70 - 130						
2,2-Dichloropropane	0.09	ND	109	70 - 130						
Bromochloromethane	0.12	ND	99	70 - 130						
Chloroform	0.05	ND	109	70 - 130						
1,1,1-Trichloroethane	0.12	ND	110	70 - 130						
Carbon Tetrachloride	0.10	ND	109	70 - 130						
1,1-Dichloropropene	0.12	ND	106	70 - 130						
Benzene	0.05	ND	100	70 - 130	95	96	1	11	70 -130	
Ethyl Acetate	0.35	ND	105	70 - 130						
1,2-Dichloroethane	0.09	ND	111	70 - 130						
Trichloroethene	0.12	ND	100	70 - 130	93	91	2	14	70 -130	
1,2-Dichloropropane	0.10	ND	101	70 - 130						
Dibromomethane	0.25	ND	108	70 - 130						

COMMENTS:

QA/QC Summary

METHOD: 8260/6200B (25 ML PURGE) (5/10/20/50/500/1000 PPB QC)
FILE NAME: WLC1011
CLIENT: PROGRESS ENVIROMENTAL(PROJECT: TAMP)

Sample ID:	769515-518			LCS	PAGE 2 OF 2			QC LIMITS	
Compound	MDL	Method	LCS %	Acceptance	MS	MSD	RPD	RPD	PERCENT
	mg/L	Blank	Recovery	Range	% Rec. *	% Rec. *			RECOVERY
Bromodichloromethane	0.07	ND	103	70 - 130					
4-Methyl-2-Pentanone	1.01	ND	101	70 - 130					
Cis-1,3-Dichloropropene	0.10	ND	101	70 - 130					
Toluene	0.26	ND	86	70 - 130	106	103	2	13	70 -130
Trans-1,3-Dichloropropene	0.12	ND	102	70 - 130					
1,1,2-Trichloroethane	0.20	ND	97	70 - 130					
Tetrachloroethene	0.17	ND	121	70 - 130					
2-Hexanone	1.42	ND	102	70 - 130					
Dibromochloromethane	0.07	ND	103	70 - 130					
1,3-Dichloropropane	0.13	ND	98	70 - 130					
1,2-Dibromoethane (EDB)	0.15	ND	97	70 - 130					
Chlorobenzene	0.10	ND	104	70 - 130	98	96	1	13	70 -130
1,1,1,2-Tetrachloroethane	0.10	ND	108	70 - 130					
Ethyl Benzene	0.07	ND	111	70 - 130					
Total Xylenes	0.29	ND	108	70 - 130					
Styrene	0.04	ND	106	70 - 130					
Bromoform	0.29	ND	113	70 - 130					
Isopropylbenzene	0.08	ND	113	70 - 130					
Bromobenzene	0.07	ND	109	70 - 130					
1,2,3-Trichloropropane	0.11	ND	112	70 - 130					
Trans-1,4-Dichloro-2-butene	0.52	ND	126	70 - 130					
N-Propylbenzene	0.08	ND	113	70 - 130					
2-Chlorotoluene	0.10	ND	116	70 - 130					
4-Chlorotoluene	0.09	ND	112	70 - 130					
1,3,5-Trimethylbenzene	0.07	ND	114	70 - 130					
Tert-Butylbenzene	0.08	ND	111	70 - 130					
1,2,4-Trimethylbenzene	0.07	ND	111	70 - 130					
Sec-Butylbenzene	0.12	ND	111	70 - 130					
1,3-Dichlorobenzene	0.12	ND	106	70 - 130					
1,1,2,2-Tetrachloroethane	0.08	ND	113	70 - 130					
p-Isopropyltoluene	0.09	ND	110	70 - 130					
1,4-Dichlorobenzene	0.08	ND	101	70 - 130					
1,2-Dichlorobenzene	0.09	ND	103	70 - 130					
N-Butylbenzene	0.10	ND	108	70 - 130					
1,2-Dibromo-3-Chloropropane(DBCP)	0.49	ND	93	70 - 130					
1,2,4-Trichlorobenzene	0.17	ND	104	70 - 130					
Naphthalene	0.18	ND	105	70 - 130					
1,2,3-Trichlorobenzene	0.18	ND	102	70 - 130					

COMMENTS:

<i>QA/QC Summary</i>									
Method: 625 (100/200 PPB QC)				FILE NAME: WLC1009-MS3			Page 1 of 2		
CLIENT: PROGRESS ENVIRONMENTAL (PROJECT ID: TAMP)									
SAMPLE ID:		769515-518				INSTRUMENT:MS-3			
Extraction Method		3510							
Date Extracted		10/07/13							
Weight Extracted		1L							
Final Extract Volume		1ML							
Date Analyzed		10/09/13							
% Surrogate Recovery		55	39	72	85	73	90		
Acceptance Range		(5 - 77)	(7 - 64)	(29 - 149)	(12 - 123)	(10 - 133)	(20 - 133)		
					LCS Accept. Range	MS % Rec.	MSD % Rec.	RPD	QC LIMITS
Compound	MDL UG/L	Method Blank	LCS % Recovery						RPD
N-Nitrosodimethylamine	0.970	ND	55	8-104					
Bis(2-chloroethyl)ether	0.430	ND	80	45-111					
Phenol	0.460	ND	46	D-76	34	34	0	42	12-110
2-Chlorophenol	0.300	ND	78	30-107	77	77	0	40	27-123
1,3-Dichlorobenzene	0.250	ND	62	48-90					
1,4-Dichlorobenzene	0.200	ND	65	50-90	67	66	1	28	36-97
1,2-Dichlorobenzene	0.100	ND	65	50-93					
Bis(2-chloroisopropyl)ether	0.380	ND	85	50-107					
N-nitrosodi-n-propylamine	0.500	ND	82	47-111	79	77	3	38	41-116
Hexachloroethane	0.220	ND	58	36-90					
2-Nitrophenol	0.670	ND	86	33-110					
2,4-Dimethylphenol	1.550	ND	70	43-100					
Nitrobenzene	0.500	ND	71	46-112					
Isophorone	0.510	ND	72	50-104					
Bis(2-chloroethoxy)methane	0.420	ND	72	49-105					
2,4-Dichlorophenol	0.540	ND	74	33-108					
1,2,4-Trichlorobenzene	0.560	ND	62	47-95	82	82	0	28	39-98
4-Chloro-3-methylphenol	1.830	ND	72	44-107	89	90	1	42	23-97
Naphthalene	0.710	ND	64	50-96					
Hexachlorobutadiene	0.770	ND	61	24-100					
2,4,6-Trichlorophenol	0.540	ND	77	22-124					
2-Methyl-4,6-Dinitrophenol	3.250	ND	84	16-115					
4-Nitrophenol	6.670	ND	40	1-69	22	24	6	50	10-80
Hexachlorocyclopentadiene	0.970	ND	77	16-85					
N/A = Data Not Available * = FAILED									

QA/QC Summary

Method: 625 (100/200 PPB QC)

FILE NAME: WLC1009-MS3

Page 2 of 2

CLIENT: PROGRESS ENVIRONMENTAL (PROJECT ID: TAMP)

Compound	MDL	Method	LCS %	LCS Acceptr ange				QC LIMITS	
					MS	MSD	RPD		
					% Rec.	% Rec.			
	UG/L	Blank	Recovery					RPD	%REC
2-Chloronaphthalene	0.420	ND	76	51-100					
Dimethyl phthalate	0.400	ND	76	47-107					
Acenaphthylene	0.150	ND	72	49-100					
2,6-Dinitrotoluene	0.670	ND	80	49-106					
Acenaphthene	0.280	ND	76	48-102	64	66	3	31	46-118
2,4-Dinitrotoluene	0.670	ND	83	50-106	65	68	4	38	24-96
Diethyl phthalate	0.820	ND	72	49-107					
4-Chlorophenyl phenyl ether	0.730	ND	78	43-112					
2,4-Dinitrophenol	4.190	ND	89	D-118					
Pentachlorophenol	5.220	ND	97	15-123	74	68	8	50	9-103
N-Nitrosodiphenylamine	1.150	ND	78	35-121					
4-Bromophenyl phenyl ether	0.670	ND	80	48-107					
Hexachlorobenzene	0.390	ND	79	50-102					
Phenanthrene	0.280	ND	78	42-105					
Anthracene	0.200	ND	75	44-104					
Di-N-Butyl phthalate	0.650	ND	74	44-111					
Benزيدine	3.370	ND	15	D-48					
Pyrene	1.920	ND	80	39-107	70	69	1	31	26-127
Benzyly butyl phthalate	1.220	ND	80	39-116					
Benzo(a)anthracene	0.380	ND	81	36-114					
3,3-Dichlorobenzidine	5.050	ND	34	6-52					
Chrysene	0.700	ND	81	45-99					
Bis(2-ethyl-hexyl)phthalate	1.140	ND	78	30-134					
Di-N-Octyl phthalate	0.740	ND	84	37-131					
Benzo(b)fluoranthene	0.770	ND	102	49-107					
Benzo(k)fluoranthene	0.600	ND	62	37-112					
Benzo(a)pyrene	0.430	ND	85	49-105					
Indeno(1,2,3-cd) pyrene	1.210	ND	85	38-122					
Dibenzo(a,h)anthracene	1.680	ND	82	43-118					
Benzo(g,h,i)perylene	1.780	ND	81	42-119					
N/A = Data Not Available				* = FAILED					

QA/QC Summary

Method 8082

Page 1 of 1

Project: *Progress Environmental - TAMP*

Sample ID	769515-518									
Date Analyzed	10/9/2013									
% Surrogate Recovery	97	100								
Acceptance Limits	(70-130)	(70-130)								

Compound	MDL ug/L	Method Blank	Trip/Field Blank	LCS % Recovery	LCS Acceptance Range	MS	MSD	RPD	QC Limits	
									RPD	MS & MSD
Aroclor-1016	0.003	BQL	N/A	94	70-130	101	95	6.12	30.0	65-135
Aroclor-1221	0.003	BQL	N/A	N/A	70-130					
Aroclor-1232	0.003	BQL	N/A	N/A	70-130					
Aroclor-1242	0.003	BQL	N/A	N/A	70-130					
Aroclor-1248	0.003	BQL	N/A	N/A	70-130					
Aroclor-1254	0.003	BQL	N/A	N/A	70-130					
Aroclor-1260	0.003	BQL	N/A	94	70-130	101	95	6.12	30.0	65-135

* QC outside of established control limits



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Quality Control Summary Results for Project Identified as THMP (A Progress Environmental, Inc. Project)

<u>Parameter</u>	<u>Prep Blank</u>	<u>ICV % Recovery</u>	<u>Spike % Recovery</u>	<u>Spike Duplicate % Difference</u>
Silver, Total	BDL	95	92	2
Arsenic, Total	BDL	95	92	<1
Beryllium, Total	BDL	94	93	<1
Cadmium, Total	BDL	96	90	<1
Chromium, Total	BDL	99	92	2
Copper, Total	BDL	101	93	2
Mercury, Total	BDL	100	96	2
Nickel, Total	BDL	102	91	<1
Lead, Total	BDL	107	93	<1
Antimony, Total	BDL	107	101	3
Selenium, Total	BDL	95	90	<1
Thallium, Total	BDL	107	91	<1
Zinc, Total	BDL	98	85	1

Corresponding Sample Numbers: 769515-518

% = Percent

ICV = Initial Calibration Verification

LCS = Laboratory Control Sample



RESEARCH & ANALYTICAL LABORATORIES, INC.

Analytical/Process Consultations



November 4, 2013

Progress Environmental

P.O. Box 5884

Winston-Salem, NC 27113-5884

Attention: Jeff Ballsieper

Chemical Analysis for Total Petroleum Hydrocarbons (TPH) Sampling Identified as Former Tamp Facility

(A Progress Environmental Project, collected 30 October 2013)

<u>Sample Identification</u>	<u>RAL Sample#</u>	<u>Date Taken</u>	<u>Time (hrs)</u>	<u>Quantitation Limit (mg/kg)</u>	<u>EPA Method 5035 (mg/kg)</u>	<u>Date Analyzed</u>	<u>Time Analyzed</u>	<u>Surrogate Recovery (Fluorobenzene)</u>
TW-8 5'	771620	10/30/13	1205	10	24.5	11/01/13	2000	95%

EPA Method 5035 = Total Petroleum Hydrocarbons as Gasoline

BQL = Below Quantitation Limit

mg/kg = milligrams per kilogram = parts per million (ppm)

Surrogate Recovery Range = 70-130%



RESEARCH & ANALYTICAL LABORATORIES, INC.

Analytical/Process Consultations



November 4, 2013

Progress Environmental

P.O. Box 5884

Winston-Salem, NC 27113-5884

Attention: Jeff Ballsieper

Chemical Analysis for Total Petroleum Hydrocarbons (TPH) Sampling Identified as Former Tamp Facility
(A Progress Environmental Project, collected 30 October 2013)

<u>Sample Identification</u>	<u>RAL Sample#</u>	<u>Date Taken</u>	<u>Time (hrs)</u>	<u>Quantitation Limit (mg/kg)</u>	<u>EPA Method 3550 (mg/kg)</u>	<u>Date Extracted</u>	<u>Date Analyzed</u>	<u>Time Analyzed</u>	<u>Surrogate Recovery (P-Terphenyl d-14)</u>
TW-8 5'	771620	10/30/13	1205	10	17.6	11/01/13	11/01/13	1823	73%

BQL = Below Quantitation Limit

NR = Not Requested

mg/kg = milligrams per kilogram = parts per million (ppm)

EPA Method 3550 = Total Petroleum Hydrocarbons as Diesel

Surrogate Recovery Range = 70-130%



RESEARCH & ANALYTICAL LABORATORIES, INC.

Analytical/Process Consultations



Chemical Analysis for Selected Parameters and Water Sample Identified as Former Tamp Facility (A Progress Environmental Project, collected 31 October 2013)

I. Volatile Organics EPA Method 6200 B	Quantitation Limit	TW-4	TW-5	TW-6	TW-7	TW-8	TW-9
Parameter	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
Acetone	25	BQL	BQL	BQL	BQL	BQL	BQL
Acrolein	100	BQL	BQL	BQL	BQL	BQL	BQL
Acrylonitrile	100	BQL	BQL	BQL	BQL	BQL	BQL
Benzene	0.5	BQL	BQL	BQL	BQL	406	2.05
Bromobenzene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Bromochloromethane	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Bromodichloromethane	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Bromoform	1.0	BQL	BQL	BQL	BQL	BQL	BQL
Bromomethane	1.0	BQL	BQL	BQL	BQL	BQL	BQL
2-Butanone	25	BQL	BQL	BQL	BQL	BQL	BQL
Carbon Disulfide	5.0	BQL	BQL	BQL	BQL	BQL	BQL
Carbon Tetrachloride	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Chlorobenzene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Chloroethane	1.0	BQL	BQL	BQL	BQL	BQL	BQL
2-Chloroethyl vinyl ether	5.0	BQL	BQL	BQL	BQL	BQL	BQL
Chloroform	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Chloromethane	1.0	BQL	BQL	BQL	BQL	BQL	BQL
2-Chlorotoluene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
4-Chlorotoluene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Cis-1,2-Dichloroethene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Cis-1,3-Dichloropropene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dibromo-3-Chloropropane(DBCP)	5.0	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dibromoethane (EDB)	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Dibromochloromethane	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Dibromomethane	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dichlorobenzene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,3-Dichlorobenzene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,4-Dichlorobenzene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,1-Dichloroethane	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dichloroethane	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,1-Dichloroethene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Dichlorofluoromethane	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dichloropropane	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,3-Dichloropropane	0.5	BQL	BQL	BQL	BQL	BQL	BQL
2,2-Dichloropropane	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,1-Dichloropropene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Ethyl Benzene	0.5	BQL	BQL	BQL	BQL	153	BQL
2-Hexanone	5.0	BQL	BQL	BQL	BQL	BQL	BQL
IPE	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1-Propylbenzene	0.5	BQL	BQL	BQL	BQL	124	0.24 J
4-Methyl-2-Pentanone	5.0	BQL	BQL	BQL	BQL	BQL	BQL
Methyl Iodide	1.0	BQL	BQL	BQL	BQL	BQL	BQL
Methylene Chloride	5.0	BQL	BQL	BQL	BQL	BQL	BQL
MTBE	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Naphthalene	0.5	BQL	BQL	BQL	BQL	58.5	BQL
N-Butylbenzene	0.5	BQL	BQL	BQL	BQL	6.80	BQL
N-Propylbenzene	0.5	BQL	BQL	BQL	BQL	59.1	BQL
p-Isopropyltoluene	0.5	BQL	BQL	BQL	BQL	12.8	BQL
Sec-Butylbenzene	0.5	BQL	BQL	BQL	BQL	11.6	BQL
Styrene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Tert-Butylbenzene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,1,1,2-Tetrachloroethane	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,1,2,2-Tetrachloroethane	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Tetrachloroethene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Toluene	0.5	BQL	BQL	BQL	BQL	9.30	BQL
Trans-1,2-Dichloroethene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Trans-1,3-Dichloropropene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Trans-1,4-Dichloro-2-butene	5.0	BQL	BQL	BQL	BQL	BQL	BQL
1,2,3-Trichlorobenzene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,2,4-Trichlorobenzene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,1,1-Trichloroethane	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,1,2-Trichloroethane	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Trichloroethene	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Trichlorofluoromethane	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,2,3-Trichloropropane	0.5	BQL	BQL	BQL	BQL	BQL	BQL
1,2,4-Trimethylbenzene	0.5	BQL	BQL	BQL	BQL	89.2	0.13 J
1,3,5-Trimethylbenzene	0.5	BQL	BQL	BQL	BQL	40.7	BQL
Vinyl Acetate	1.0	BQL	BQL	BQL	BQL	BQL	BQL
Vinyl Chloride	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Total Xylenes	1.0	BQL	BQL	BQL	BQL	198	0.54 J
Ethanol	100	BQL	BQL	BQL	BQL	BQL	BQL
Tert-butyl Alcohol	50.0	BQL	BQL	BQL	BQL	BQL	BQL
Ethyl Tertbutyl Ether	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Tert-butyl Formate	5.0	BQL	BQL	BQL	BQL	BQL	BQL
Tert-amyl Alcohol	50.0	BQL	BQL	BQL	BQL	BQL	BQL
Tert-Amyl Methyl Ether	0.5	BQL	BQL	BQL	BQL	BQL	BQL
Dilution Factor		1	1	1	1	10	1
Sample Number		771621	771622	771623	771624	771625	771626
Sample Date		10/31/13	10/31/13	10/31/13	10/31/13	10/31/13	10/31/13
Sample Time (hrs)		1205	1215	1155	1145	1130	1120
Date Analyzed		10/31/13	10/31/13	10/31/13	10/31/13	10/31/13	10/31/13
Time Analyzed		1924	1955	2027	2058	2130	1749
Surrogate Recovery	Range						
DBFM	(70-130%)	117%	118%	113%	115%	116%	112%
Toluene-d8	(70-130%)	85%	84%	86%	84%	89%	89%
4-BFB	(70-130%)	108%	111%	105%	108%	114%	108%

BQL - Below Quantitation Limits

J - Estimated concentration, present but below quantitation limit



Analytical / Process Consultations
Phone (336) 996-2841

COMPANY Progress Environmental, Inc	JOB NO.
STREET ADDRESS 120 Fayette Street	PROJECT FORMER TAMP FACILITY
CITY, STATE, ZIP Winston-Salem NC 27101	SAMPLER NAME (PLEASE PRINT) Jeff Ballsinger
CONTACT Jeff Ballsinger	PHONE 722-9999
	SAMPLER SIGNATURE JBalls

[illegible]

RELINQUISHED BY <i>G. Ball</i>	DATE/TIME <i>10/21/2015</i>	RECEIVED BY <i>Michelle</i>	REMARKS: <i>Holds 9260/9276 For TW-8-5</i>
RELINQUISHED BY	DATE/TIME	RECEIVED BY	SAMPLE TEMPERATURE AT RECEIPT <i>2.6</i> °C <i>online</i>



**RESEARCH & ANALYTICAL
LABORATORIES, INC.**

Analytical/Process Consultations

CASE NARRATIVE

One (1) soil and six (6) water samples were received in good condition on 31 October 2013. The samples were analyzed without difficulties unless noted below.

11-4-13

Sidney L. Champion
Director of Laboratory Services

Date

QA/QC Summary

METHOD: 8260/6200B (25 ML PURGE) (5/10/20/50/500/1000 PPB QC)

FILE NAME: WLC1031

CLIENT: PROGRESS ENVIROMENTAL (PROJECT: FORMER TAMP FACILITY)

Sample ID:		771621-626						PAGE 1 OF 2	
Extraction Method	5035								
Date Extracted	N/A								
Volume Used	25 ML								
Final Volume	25 ML								
Date Analyzed	10/31/13								
% Surrogate Recovery	109	93	106						
Acceptance Range	(70-130)	(70-130)	(70-130)						
				LCS					QC LIMITS
Compound	MDL mg/L	Method Blank	LCS % Recovery	Acceptance Range	MS % Rec. *	MSD % Rec. *	RPD	RPD	PERCENT RECOVERY
Dichlorodifluoromethane	0.12	ND	92	70 - 130					
Chloromethane	0.07	ND	99	70 - 130					
Vinyl Chloride	0.11	ND	99	70 - 130					
Bromomethane	0.18	ND	97	70 - 130					
Chloroethane	0.11	ND	105	70 - 130					
Trichlorofluoromethane	0.09	ND	116	70 - 130					
Acetone	1.18	ND	107	70 - 130					
Acrylonitrile	12.38	ND	115	70 - 130					
2-Butanone	0.88	ND	107	70 - 130					
1,1-Dichloroethene	0.09	ND	104	70 - 130	100	96	5	14	70 -130
Methyl Iodide	0.19	ND	90	70 - 130					
Carbon Disulfide	0.45	ND	106	70 - 130					
Methylene Chloride	0.57	ND	114	70 - 130					
Trans-1,2-Dichloroethene	0.10	ND	106	70 - 130					
1,1-Dichloroethane	0.17	ND	112	70 - 130					
Isopropyl ether (IPE)	0.12	ND	112	70 - 130					
Methyl-Tert-Butyl ether (MTBE)	0.16	ND	115	70 - 130					
Vinyl Acetate	0.24	ND	120	70 - 130					
Cis-1,2-Dichloroethene	0.09	ND	104	70 - 130					
2,2-Dichloropropane	0.09	ND	115	70 - 130					
Bromochloromethane	0.12	ND	114	70 - 130					
Chloroform	0.05	ND	117	70 - 130					
1,1,1-Trichloroethane	0.12	ND	118	70 - 130					
Carbon Tetrachloride	0.10	ND	120	70 - 130					
1,1-Dichloropropene	0.12	ND	116	70 - 130					
Benzene	0.05	ND	108	70 - 130	105	106	1	11	70 -130
Ethyl Acetate	0.35	ND	106	70 - 130					
1,2-Dichloroethane	0.09	ND	125	70 - 130					
Trichloroethene	0.12	ND	108	70 - 130	105	106	1	14	70 -130
1,2-Dichloropropane	0.10	ND	108	70 - 130					
Dibromomethane	0.25	ND	119	70 - 130					

COMMENTS:

QA/QC Summary

METHOD: 8260/6200B (25 ML PURGE) (5/10/20/50/500/1000 PPB QC)

FILE NAME: WLC1031

CLIENT: PROGRESS ENVIROMENTAL (PROJECT: FORMER TAMP FACILITY)

Sample ID:	771621-626			LCS	PAGE 2 OF 2			QC LIMITS	
Compound	MDL	Method	LCS %	Acceptance	MS	MSD	RPD	RPD	PERCENT
	mg/L	Blank	Recovery	Range	% Rec. *	% Rec. *			RECOVERY
Bromodichloromethane	0.07	ND	108	70 - 130					
4-Methyl-2-Pentanone	1.01	ND	105	70 - 130					
Cis-1,3-Dichloropropene	0.10	ND	107	70 - 130					
Toluene	0.26	ND	91	70 - 130	87	85	3	13	70 -130
Trans-1,3-Dichloropropene	0.12	ND	112	70 - 130					
1,1,2-Trichloroethane	0.20	ND	98	70 - 130					
Tetrachloroethene	0.17	ND	102	70 - 130					
2-Hexanone	1.42	ND	106	70 - 130					
Dibromochloromethane	0.07	ND	107	70 - 130					
1,3-Dichloropropane	0.13	ND	102	70 - 130					
1,2-Dibromoethane (EDB)	0.15	ND	99	70 - 130					
Chlorobenzene	0.10	ND	111	70 - 130	109	108	1	13	70 -130
1,1,1,2-Tetrachloroethane	0.10	ND	118	70 - 130					
Ethyl Benzene	0.07	ND	114	70 - 130					
Total Xylenes	0.29	ND	112	70 - 130					
Styrene	0.04	ND	112	70 - 130					
Bromoform	0.29	ND	112	70 - 130					
Isopropylbenzene	0.08	ND	118	70 - 130					
Bromobenzene	0.07	ND	123	70 - 130					
1,2,3-Trichloropropane	0.11	ND	115	70 - 130					
Trans-1,4-Dichloro-2-butene	0.52	ND	128	70 - 130					
N-Propylbenzene	0.08	ND	121	70 - 130					
2-Chlorotoluene	0.10	ND	122	70 - 130					
4-Chlorotoluene	0.09	ND	121	70 - 130					
1,3,5-Trimethylbenzene	0.07	ND	122	70 - 130					
Tert-Butylbenzene	0.08	ND	120	70 - 130					
1,2,4-Trimethylbenzene	0.07	ND	121	70 - 130					
Sec-Butylbenzene	0.12	ND	119	70 - 130					
1,3-Dichlorobenzene	0.12	ND	114	70 - 130					
1,1,2,2-Tetrachloroethane	0.08	ND	107	70 - 130					
p-Isopropyltoluene	0.09	ND	113	70 - 130					
1,4-Dichlorobenzene	0.08	ND	107	70 - 130					
1,2-Dichlorobenzene	0.09	ND	111	70 - 130					
N-Butylbenzene	0.10	ND	117	70 - 130					
1,2-Dibromo-3-Chloropropane(DBCP)	0.49	ND	108	70 - 130					
1,2,4-Trichlorobenzene	0.17	ND	109	70 - 130					
Naphthalene	0.18	ND	106	70 - 130					
1,2,3-Trichlorobenzene	0.18	ND	111	70 - 130					

COMMENTS:

QA/QC Summary

Method 5035

Page 1 of 1

Project : *Progress Environmental, Inc. - Former Tamp Facility*

Sample ID	771620								
Sample Prep Method	5030								
Volume/Used	5 mls								
Final Extract Volume	N/A								
Date Analyzed	11/01/13								
% Surrogate Recovery	109								
Acceptance Limits	(70-130)								

Compound	MDL mg/kg	Method Blank	Trip/Field Blank	LCS % Recovery	LCS Acceptance Range	Sample	Duplicate	%RPD	Control Limits
Gasoline	0.57	BQL	N/A	99	72-128	788	786	<1	20%

:

N/A = Data Not Available

QA/QC Summary

Method 3550

Page 1 of 1

Project: Progress Environmental, Inc. - Former Tamp Facility

Sample ID	771620								
Sample Prep Method	3550								
Volume/Used	15 g								
Final Extract Volume	10 mls								
Date Analyzed	11/01/13								
% Surrogate Recovery	91								
Acceptance Limits	(70-130)								

Compound	MDL mg/kg	Method Blank	Trip/Field Blank	LCS % Recovery	LCS	Sample	Duplicate	%RPD	Control Limits
					Acceptance Range				
Diesel	1.36	BQL	N/A	103	80-120	80.0	78.0	2.53	20

N/A = Data Not Available